Methodological guide on time-use measurements in Latin America and the Caribbean





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Introduction

Knowing and understanding how, and in what activities, people spend their time is fundamental for comprehending both the personal and the social experience of the organization of life and time. Time-use data are crucial for analysing the inequalities inherent in its use and distribution, the levels of well-being among the population, and its contribution to society and the economy. Time-use surveys are key tools for capturing this information and have proven highly relevant for the design, implementation and monitoring of public policies, and for research in different areas. The latter include gender analysis; studies on the link between monetary poverty, income and the distribution and allocation of time; national, regional and international needs for data on unpaid work; and the new requirements of labour statistics.

Since the second half of the twentieth century, the study of time use has been crucial for understanding some of the essential components of the social and economic structure of societies. Analysis of the information provided by time-use measurements has exposed the unequal distribution of work within households, and made it possible to quantify the amount of time allocated to daily activities. Inequalities are materialized in the use of time; and these then become constraints on well-being and the exercise of certain rights —because opportunities for personal and vocational development, and for political and community participation, vary according to the availability of time (Marco Navarro, 2012).

In Latin America and the Caribbean, the prevailing gender order and social structure have caused profound gender differences in the distribution of time to become entrenched. Gender-sensitive analyses of data on time use have made it possible to identify the social, economic and cultural conditions and factors that influence the distribution of time according to the tacit mandates of the patriarchal system that cause time to be allocated to certain types of tasks on the basis of gender roles. Time-use surveys have provided empirical evidence of the sexual division of labour within households and the relationship between productive and reproductive work. They have also revealed the effects of unpaid domestic and care work on women's lives and well-being; and they have made it possible to construct indicators that reveal inequalities between women and men and also between different social groups. In addition, they have shed light on the interconnections between gender, ethnic-racial status, place of residence, age and class in the production and reproduction of inequalities, based on an intersectional analysis.

The importance of compiling time-use statistics for evidence-based policies and research is noted in multiple international agreements. The representatives of the countries that participated in the Fourth World Conference on Women (held in Beijing in 1995) agreed to contribute to the development of more comprehensive knowledge on all forms of work, as well as public policies to foster equality through improved data collection and new measurements in different areas. They signed a commitment to measure and value unpaid work through a satellite account of the national accounts (United Nations, 1995). More recently, the 2030 Agenda for Sustainable Development raises gender equality and the empowerment of all women and girls in a cross-cutting manner, and explicitly in Sustainable Development Goal (SDG) 5 to "Achieve gender equality and empower all women and girls." The 2030 Agenda has reinforced the need to recognize and value unpaid care and domestic work, recognizing that this contributes directly to women's autonomy in the public and private spheres (target 5.4). Indicator 5.4.1 (Proportion of time spent on unpaid domestic and care work, by sex, age and location) has been proposed to follow up on this target (United Nations, 2015).

At the regional level, the commitments made by governments at the Regional Conferences on Women in Latin America and the Caribbean have recognized the need for this type of measurement and its importance as a fundamental instrument for exposing gender inequalities; and they have also promoted time-use surveys. In this context, the countries have made major efforts to collect the information in question, resulting in a proliferation of time-use surveys in the region. To date, 23 Latin American and Caribbean countries have conducted at least one measurement of time spent on domestic and care work, while 10 have made economic valuations of unpaid work in households, and five have calculated the corresponding satellite accounts.¹

¹ This quantification of time use measurements in the region includes experiences in final surveys as well as pilot surveys. Thus, the total number of countries (23) differs from the list presented in table II.1 (22). This divergence is due to the fact that, up to the completion of this Guide, Grenada had conducted only one pilot survey of time-use data.

In keeping with the agreements of the Regional Gender Agenda, within the framework of the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean (ECLAC), the region's countries have reaffirmed the relevance of time-use data. This resulted in the formation of the Working Group on Gender Statistics, during the fourth meeting of the Statistical Conference of the Americas in 2007. The working group operated until 2019, promoting the production, development, systemization and consolidation of statistics and gender indicators for the formulation, monitoring and evaluation of public policies. With regard to the use of time, the Working Group on Gender Statistics played a strategic role in promoting, supporting and monitoring the implementation of surveys of this type in the region —both in their conceptual and methodological development, and in the compilation and analysis of the data for the formulation of public policies on equality. The Group has also promoted exchange and dialogue between the institutions that produce the information —the national statistical offices (NSOs)—and its users —the national machineries for the advancement of women— and debate with other actors such as representatives of the academic community and international organizations.

In this context, the meetings of specialists in time use and unpaid² work and the international meetings on gender statistics,³ held under the auspices of the Working Group on Gender Statistics, were fundamental for considering the production and exploitation of time-use data, improving the methodological quality of the surveys and further harmonizing time-use measurements in the region. A first step in this direction was the adoption by the region's countries of a gender-sensitive classifier appropriate to the context of the region: the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) (ECLAC/INEGI, 2016).

Despite these endeavours, the region is facing the challenge of increasing the harmonization and comparability of measurements of time use and unpaid work. The methodological differences between the various surveys make it harder to generate regional aggregate data. In view of this, the member countries of the Working Group on Gender Statistics agreed to prepare a methodological document that would collate the experience of the countries of the region and make recommendations for the design of measurement instruments that would make it possible to generate comparable indicators with common regionally agreed-upon methodologies. Clear methodological guidelines are necessary to enable the data to respond to relevant policy questions and to be internationally comparable.

At the tenth meeting of the Statistical Conference of the Americas held in 2019, the countries approved, for the 2020–2021 biennium, the Working Group to prepare the methodological guide on time-use measurements in Latin America and the Caribbean, the general objective of which was to:

"Sytematize experiences in the measurement of time use in Latin America and the Caribbean and to develop guidelines for the conduct of time-use surveys and the calculation of indicators on time use and unpaid work in the region" (ECLAC, 2019a, p. 13).

It would also "determine a minimum list of activities to be included in time-use surveys so that the main time-use indicators are comparable, specifically SDG indicator 5.4.1." (ECLAC, 2019a, p. 13). This guide is the final output of the working group formed by 19 institutions in the region, including national statistical offices and machineries for the advancement of women. It was coordinated by the National Institute of Statistics and Geography (INEGI) of Mexico, with collaboration from ECLAC and the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) acting as technical secretariat.⁴

² These meetings, which were held annually in Mexico, were set up as a mechanism for exchange between regional specialists and the staff of national statistical institutes and machineries for the advancement of women to design and implement time-use surveys and analyse their findings.

These meetings have been part of the work programme of the Working Group on Gender Statistics at the Statistical Conference of the Americas since its inception; they are held annually in Aguascalientes (Mexico). Throughout its 21 editions, various topics have been discussed, such as statistics on violence against women, and indicators of political participation, health, time use and unpaid work.

In addition to these organizations, the following are also members of the group: National Institute of Statistics and Censuses (INDEC) of Argentina, Statistical Institute of Belize (SIB), National Institute of Statistics (INE) of the Plurinational State of Bolivia, Brazilian Institute of Geography and Statistics (IBGE) of Brazil, National Institute of Statistics (INE) of Chile, National Administrative Department of Statistics (DANE) of Colombia, National Institute of Statistics and Census of Costa Rica, National Office of Statistics and Information (ONEI) of Cuba, Department of Statistics and Censuses (DIGESTYC) of El Salvador, Salvadoran Institute for the Development of Women of El Salvador, Salvadoran Institute for the Development of Women of El Salvador, National Women's Institute (INMUJERES) of Mexico, Directorate General for Statistics, Surveys and Censuses (DGEEC) of Paraguay, National Institute of Statistics and Informatics (INEI) of Peru, National Statistical Office (NSO) of the Dominican Republic, National Women's Institute (INMUJERES) Uruguay, National Institute of Statistics of Uruguay and United Nations Development Programme (UNDP).

The guide will enable the countries of Latin America and the Caribbean to learn about experiences in measuring time use in the region, the diversity of tools used and the lessons learned. It will facilitate decision-making by entities such as the national statistical offices and the national machineries for the advancement of women, and by the academic community specialized in gender issues. Throughout this process, different mechanisms have been used to exchange information on the various aspects and decisions spanning all stages of the design, formulation, implementation and evaluation of a time-use survey, which has broadened the scope of dialogue between different actors. Moreover, owing to the collaborative and participatory work dynamic applied in preparing the guide, different needs and specifics are documented not only from a theoretical perspective, but also based on the reality and experience of the countries. In addition to contributing to the institutions in planning their future measurements, this also makes a major contribution to the methodological discussion on time-use surveys at both the regional and the international levels. In particular, the long track-record of the region's countries in using questionnaires based on a list of activities has been documented in this guide. In general, the document seeks to contribute to the implementation and harmonization of quality time-use measurements in the region, through a didactic methodological instrument based on regional learning to guide decision-making.

Unlike other guides that exist, this one focuses on the Latin American and Caribbean region and takes regional characteristics into account. It has also been developed from a gender perspective. The guidelines are not intended to offer single, rigid solutions, but instead to offer a range of flexible options, highlighting the advantages and disadvantages involved in each of the methodological decisions. In addition, it presents the Minimum Set of Time-Use Activities for Latin America and the Caribbean, an instrument agreed upon by the countries of the working group to prepare the methodological guide on time-use measurements in Latin America and the Caribbean that aims to gradually harmonize such measurements across the region. This minimum list will serve as a basic criterion for compiling time-use data and constructing indicators with a common methodology, in particular for SDG indicator 5.4.1. In addition, to move forward in rolling out the minimum activities list, a standard time-use questionnaire is being proposed for Latin America and the Caribbean, which the countries of the region can adapt and use for their time-use measurements in the future.

The production of the guide has been affected by the COVID-19 pandemic crisis. The pandemic's direct impact on people's lives and on the time spent on domestic and unpaid care work has highlighted the care crisis in the region, and the urgent need for information to make visible the burden that these tasks impose on women's lives. However, mobility restriction measures posed a challenge for traditional surveys which, in the region, have been conducted in person. With this challenge in mind, the guide includes a number of basic recommendations for collecting time-use data in crisis circumstances. Although this topic was not within the original scope of the document, the Working Group decided to include it, owing to the recurrent impact of crises on the distribution of time and the widening of inequalities. Nonetheless, as it was not among the initial objectives, the guidelines in question are neither extensive nor exhaustive.

This guide is organized in six chapters. Chapter I describes the historical evolution and political-institutional background to the development of time-use measurements; it presents the main regional and international frameworks that regulate time-use surveys and the origin of time-use studies. Chapter II presents the latest advances in time-use measurements in the region, systemizing the different experiences and describing the paths followed to date. Chapter III then presents the theoretical and conceptual frame of reference for time-use surveys, focusing on the concepts of production and work.

Chapter IV describes the methodological issues that need to be considered when measuring time use, highlighting the advantages and disadvantages of each one in order to guide decision-making, and emphasizing the lessons learned from evaluations of the application of each methodology. Chapter V presents the Minimum Set of Time-Use Activities for Latin America and the Caribbean and its adaptation in the standard questionnaire. Lastly, chapter VI discusses the importance and potential of time-use data for the design of public policies in different areas.

Chapter I

Time-use from a gender perspective in Latin America and the Caribbean

A. Distribution of time and reproduction of inequalities

As a multidimensional concept, time has been studied by a variety of disciplines, including physics, philosophy, economics, psychology, history and theology, among others (ECLAC, 2017a). In philosophy, notions of time have mainly centred on two concepts: natural time and social time. The first represents an objective, observable, continuous, homogeneous, measurable and independent exogenous phenomenon that responds to natural facts and processes, such as days and nights, the rotation of the earth, childhood, old age or death. The second is a heterogeneous and social construction. In this sense it is the subjective representation that people make of their existence and is related to social events that determine changes (Carrasco, 2016; ECLAC, 2017a).

The social construction of the conception of time in different societies is closely linked to power structures, social relations and production and consumption patterns (Carrasco, 2016). Various authors consider time as one of the fundamental dimensions of the organization of people's lives. They note that its social construction is regulated by implicit contracts that derive from a sociocultural consensus marked by societal power structures, which perpetuates and entrenches asymmetries of power, access to resources and privileges (Aguirre, 2009).

As time is a scarce, finite and limited resource, some activities have to be prioritized over others; and it has a positive or negative impact on people's quality of life. This prioritization is not an individual choice, since it is mediated by social, economic, gender, life cycle, ethnic, geographic and other conditioning factors.

Research on time use has exposed these power relations and gender inequality, which are manifested in the differential use of time (Santoyo and Pacheco 2014). Inequality in the distribution and use of time is a reflection of the sexual division of labour, which assigns different activities to men and women on the basis of gender. This is built into the social fabric and transmitted through socialization. The sexual division of labour, which prevails today in the region's societies, continues to be a structural factor in the inequalities and injustices that affect women in the family, the labour market and political participation. For this reason, it is essential to have measurement instruments that make it possible to observe the distribution of the daily tasks necessary for life in society, in both the public and private domains.

Time-use measurements are a fundamental tool for revealing inequalities originating in the sexual division of labour. The results of these measurements highlight the gaps and inequalities that exist between women and men, because they make it possible to study various aspects of people's daily lives; and they are a powerful instrument for the design of public policies. They can also be used to produce more accurate statistics on paid work, moonlighting and atypical forms of employment. In addition, by complementing traditional labour force surveys, they can shed light on women's participation in the labour market, including the informal sector, which is so widespread in the Latin American region (United Nations, 2004). Time-use data can provide very important clues for detecting daily bottlenecks and revealing how women and men organize remunerated work and unpaid care activities. (Esquivel, Faur and Jelin, 2012).

B. Time-use surveys in Latin America and the Caribbean

1. International and regional regulatory frameworks and mandates

The primary international milestone and instrument in the defence of women's rights and the promotion of gender equality is the Convention on the Elimination of All Forms of Discrimination against Women, which was adopted by the General Assembly of the United Nations on 18 December 1979. Although the Convention does not explicitly require ratifying States to produce statistics and measure time use, it recognizes the undervalued contribution to social well-being made by women by fulfilling family responsibilities; and it promotes co-responsibility between men and women as a path for societal development.

The Convention on the Elimination of All Forms of Discrimination against Women states that one should bear in mind:

"the great contribution of women to the welfare of the family and to the development of society, so far not fully recognized, the social significance of maternity and the role of both parents in the family and in the upbringing of children." (United Nations, 1979).

It also states that:

"the role of women in procreation should not be a basis for discrimination but that the upbringing of children requires a sharing of responsibility between men and women and society as a whole" (United Nations, 1979).

On recognizing childcare and its democratization between men and women, Article 11 (2.c) of the Convention proposes:

"To encourage the provision of the necessary supporting social services to enable parents to combine family obligations with work responsibilities and participation in public life, in particular through promoting the establishment and development of a network of child-care facilities." (United Nations, 1979).

The foregoing declarations signalled a shift in international awareness of the situation of women, the multiple forms of discrimination that violate their rights, and the impact of such discrimination on social inequalities and social development (Aguirre and Ferrari, 2013).

The United Nations Decade for Women (1975–1985) under which three World Conferences on Women were held (in Mexico, 1975; in Copenhagen, 1980; and in Nairobi, 1985), gradually strengthened international and national machineries for the advancement of women and made progress in recognizing the various forms of work.

A decade later, at the Fourth World Conference on Women (held in Beijing in 1995), the need to appreciate differences between women and men in terms of paid and unpaid work was recognized for the first time in a powerful and explicit way. The Beijing Declaration and Platform for Action (paragraph 68 (b)) recommends the following:

"Devise suitable statistical means to recognize and make visible the full extent of the work of women and all their contributions to the national economy, including their contribution in the unremunerated and domestic sectors, and examine the relationship of women's unremunerated work to the incidence of and their vulnerability to poverty." (United Nations, 1995 p. 43).

Strategic Objective H.3 of the Beijing Declaration and Platform for Action, which refers to the preparation of data and information with a gender breakdown, clearly states the need to produce time-use measurements. Paragraph 206 of the Platform proposes the following:

- "(f) Develop a more comprehensive knowledge of all forms of work and employment by:
 - (i) Improving data collection on the unremunerated work which is already included in the United Nations System of National Accounts, such as in agriculture, particularly subsistence agriculture, and other types of nonmarket production activities;

- (ii) Improving measurements that at present underestimate women's unemployment and underemployment in the labour market;
- (iii) Developing methods, in the appropriate forums, for assessing the value, in quantitative terms, of unremunerated work that is outside national accounts, such as caring for dependants and preparing food, for possible reflection in satellite or other official accounts [...].
- (g) Develop an international classification of activities for time-use statistics that is sensitive to the differences between women and men in remunerated and unremunerated work, and collect data disaggregated by sex. At the national level, subject to national constraints:
 - (i) Conduct regular time-use studies to measure, in quantitative terms, unremunerated work, including recording those activities that are performed simultaneously with remunerated or other unremunerated activities;
 - (ii) Measure, in quantitative terms, unremunerated work that is outside national accounts and work to improve methods to assess its value, and accurately reflect its value in satellite or other official accounts that are separate from but consistent with core national accounts" (United Nations, 1995, pp. 151-152).

The Beijing Declaration and Platform for Action is a milestone and a considerable step forward in the conceptual and methodological development of time-use surveys and statistics. It has had major repercussions on the construction of international classifications on time-use measurement that make it possible to value women's contribution to the economy and their inclusion in gross domestic product (GDP). This conference marked a turning point by approving a proposal to expand the scope of national accounting systems with a satellite account measuring unpaid work (Durán, 2006).

Other international events have accompanied the process of recognizing time-use measurement: the International Conference on the Measurement and Valuation of Unpaid Work (Canada, 1994), the World Summit for Social Development (Copenhagen, 1995) and the eighteenth, nineteenth and twentieth International Conferences of Labour Statisticians of the International Labour Organization (ILO).

The eighteenth International Conference of Labour Statisticians (held in Geneva in 2008) recognized the productive activities of households as unpaid work outside the System of National Accounts, but within the general production boundary. It recommended the production of statistics on the number of hours actually worked and the number of hours usually worked and the arrangement of these hours for all members within families and all population groups (ILO, n/da., p. 42). The nineteenth Conference (held in Geneva in 2013) broadened the concept of work to incorporate household goods and service production activities in work measurements. The twentieth Conference (held in Geneva in 2018) delved further into the analysis of the economic value of unpaid work in the economy and emphasized the "need to include workers who have until now been invisible in statistical terms —for example women doing unpaid household work or volunteers such as community or care workers— was also discussed in detail" (ILO, n/db and 2018).

Adopted by the member countries of the United Nations in 2015, the 2030 Agenda for Sustainable Development and its 17 SDGs recognize gender equality, and the rights and empowerment of women and girls as central elements for sustainable development. This commitment cuts across the entire Agenda, "It is present in the declaration, in the Sustainable Development Goals and corresponding targets, in the means of implementation and Global Partnership and in the follow-up and review and in the proposed indicators for measuring progress" (Bidegain Ponte, 2017, p. 11). In particular, Goal 5 of the 2030 Agenda is explicitly dedicated to gender equality, with target 5.4 being to "recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate" (United Nations, 2015, p. 18).

The Regional Conference on Women in Latin America and the Caribbean provides an enabling framework for the development of a Regional Gender Agenda, which includes the commitments made by the region's governments on women's rights and autonomy and gender equality.⁵ In these commitments, made over the course of more

⁵ The Regional Conference on Women in Latin America and the Caribbean is a subsidiary body of ECLAC, of which 13 meetings have been held to date. The first was held in Cuba in 1977.

than 40 years, the governments of the region have recognized the importance of measuring unpaid work in order to highlight gender inequalities and contribute to the formulation, monitoring and evaluation of policies aimed at improving and transforming the prevailing sexual division of labour. The Regional Gender Agenda is aligned with the 2030 Agenda for Sustainable Development and invokes synergies with agreements emanating from other regional conferences. These include the Statistical Conference of the Americas, the Regional Conference on Social Development in Latin America and the Caribbean, and the Regional Conference on Population and Development in Latin America and the Caribbean (Bidegain Ponte, 2017).

Several of the agreements reached at the Regional Conference on Women in Latin America and the Caribbean underscore the impact of the overload of unpaid work and care activities on women's autonomy; and they also reiterate the need to make periodic progress in measuring the use of time, in order to recognize women's contribution to the economy in its productive and reproductive dimensions. In addition, they emphasize the importance of care and the need for statistical data that can serve as basic inputs for the analysis of household care strategies and the social organization of care —information useful for the design of public policies.

In the framework of the first agreement, in 1977, the Regional Plan of Action for the Integration of Women into Latin American Economic and Social Development (Havana), argues that:

"Irrespective of the particular characteristics of each country of the region, it is a global reality that the working woman, who is both mother and housewife, has an excessive burden of activities as she is usually responsible not only for the care of the children but also for the home chores and sick family members" (ECLA, 1977, p. 25).

In the Regional Programme of Action for the Women of Latin America and the Caribbean, 1995–2001 (Mar del Plata, 1994), the countries of the region recognize as an obstacle the "failure to recognize and value the unremunerated work which women carry out in agriculture, food production, child-rearing and household activities, and the failure to adequately support this work" (ECLAC, 1994, p. 9).

It therefore includes the following as strategic actions:

"Improving the working conditions of women who perform unwaged labour and women who work in the informal sector; compiling information on the value of their work to ensure that commensurable benefits accrue to them under social security and retirement systems [and] creating mechanisms for quantifying and determining the value of the economic contribution of women's unwaged work in the home and in agriculture, food production, reproduction and community work; designing gender indicators to recognize the value of these contributions to GDP; and defining as workers, in the System of National Accounts, persons who perform unwaged labour" (ECLAC, 1994, pp. 17–18).

The Lima Consensus (2000) and the Mexico City Consensus (2004) reiterate the need to deepen the development of time-use statistics and to recognize the social and economic contribution of women's unpaid work.

Paragraph 9 of the Quito Consensus adopted at the tenth session of the Regional Conference on Women in Latin America and the Caribbean (Quito, 2007) recognizes:

"The social and economic value of the unpaid domestic work performed by women, caregiving as a public matter which falls within the purview of States, local governments, organizations, companies and families, and the need to promote shared responsibility by women and men within the family" (ECLAC, 2007a, p. 19).

Within this framework, agreement 23 proposes:

"To develop instruments, especially time-use surveys, for periodically measuring unpaid work performed by women and men in order to make such work visible and recognize its value, to incorporate their results into the System of National Accounts and to design economic and social policies accordingly" (ECLAC, 2007a, p. 23).

The agreements reached in the Quito Consensus on time-use measurements emphasize the periodicity of the application of measurement instruments and the need to organize the results to create gender equity policies that promote an equitable distribution of paid and unpaid work between men and women. They also emphasize the provision of care as a public issue that States should incorporate into their public policies.

The Brasilia Consensus (reached in Brasilia in 2010) reiterates the need to continue deepening time-use measurements in the region. The text states the following:

"Latin America and the Caribbean is still the most inequitable region in the world and exhibits widening gender, ethnic and racial gaps; that the social, political, cultural and economic patterns underlying the sexual division of labour must be changed without delay; and that the key to this is a new equation between the State, society as a whole, the market and families in which unpaid domestic work and caregiving are constructed and treated as public matters and a responsibility to be shared among all these spheres" (ECLAC, 2010, p. 3).

In terms of public policies on gender, section 1 of the Brasilia Consensus proposes to:

"adopt all the social and economic policy measures required to advance towards the attribution of social value to the unpaid domestic and care work performed by women and recognition of its economic value" (ECLAC, 2010, p. 4).

With respect to satellite accounts, it emphasizes the need to:

"encourage the establishment, in national accounts, of a satellite account for unpaid domestic and care work performed by women" (ECLAC, 2010, p. 4).

The Montevideo Strategy for Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030 was adopted at the thirteenth session of the Regional Conference on Women in Latin America and the Caribbean, as a mechanism for moving from commitments to action. At this session of the Conference, governments recognized the sexual division of labour as one of the constituent challenges of gender inequality in the region. In its implementation pillar relating to information systems, it highlights the development and strengthening of measurement instruments such as surveys on time-use and ensuring their periodicity and budget as a measure for implementing the Regional Gender Agenda (Montevideo Strategy, 2016, measure 9.c) (ECLAC, 2017b).

At the fourteenth session of the Regional Conference on Women in Latin America and the Caribbean, held in 2020, the countries of the region adopted the Santiago Commitment and, in paragraph 26, agreed to:

"Design comprehensive care systems from a gender, intersectional, intercultural and human rights perspective that foster co-responsibility between men and women, the State, the market, families and the community, and include joined-up policies on time, resources, benefits and universal, good-quality public services to meet the different care needs of the population, as part of social protection systems" (ECLAC, 2020, p. 5).

The Santiago Commitment also reinforces the importance of strengthening the production of gender statistics, including statistics on time-use, which facilitates data comparability and the construction of time series and contributes to the monitoring of the commitments of the Regional Gender Agenda and the 2030 Agenda for Sustainable Development (ECLAC, 2020).

In addition to the consensuses reached by governments at the Regional Conferences on Women in Latin America and the Caribbean, the Working Group on Gender Statistics at the Statistical Conference of the Americas played an important role in the conceptual and methodological development and the production and dissemination of analytical documents on time use in the Latin American region.

The Working Group on Gender Statistics, proposed by Statistical Conference of the Americas member countries in 2006 and approved during the fourth meeting of the Statistical Conference of the Americas (held in Santiago, Chile in 2007), aimed to promote the production, development, systemization and consolidation of statistics and gender indicators for the formulation, monitoring and evaluation of public policies. The Group was coordinated by Mexico, through INEGI; while the Division for Gender Affairs of ECLAC served as technical secretariat; and Mexico's National Women's Institute (INMUJERES) and UN-Women served as advisory bodies (ECLAC, 2007b).

The Statistical Conference of the Americas Working Group on Gender Statistics comprised the following countries: Argentina, Bahamas, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Panama and the Plurinational State of Bolivia.

The activities of the Working Group on Gender Statistics has included periodic debate among representatives of governments, international organizations and the academic community on methodologies and the analysis of information on time use and unpaid work in households. From the technical standpoint, the Working Group played a strategic role in promoting, supporting and following up on the implementation of time-use measurements in the countries of the region, both in their conceptual advances and in the collection and analysis of data for the formulation of public policies on equality. At the tenth meeting of Statistical Conference of the Americas, held in 2019, the countries of the region agreed to form the Working Group for preparation of the methodological guide on time-use measurements in Latin America and the Caribbean. The Working Group set out to produce the present guide by systemizing time-use measurement experiences in Latin America and the Caribbean, and by establishing guidelines for conducting time-use surveys and calculating indicators on the use of time and unpaid work in the region. This group also provided continuity to the mechanisms for dialogue and methodological and conceptual development created by the Working Group on Gender Statistics, with a special focus on time-use statistics.

The international meetings on gender statistics and the meetings of specialists in surveys on time use and unpaid work, which have been held every year in Mexico since 2002, also played a fundamental role in fostering reflection and the exchange of experiences among the different producers and users of this information. They also promoted the use of gender statistics for the formulation of policies that enhance women's autonomy, mainly in their economic autonomy.

2. Time-use surveys

Time-use surveys are methodological tools for data collection that make it possible to obtain quantitative measurements of the activities that people undertake in a given period of time (usually the 24 hours of a day, or the seven days of a week) and the amount of time they devote to each of these activities. The information provided by these surveys enables an exhaustive analysis to be made of the time spent on all forms of work, including the various activities related to unpaid domestic and care work, paid work, community and volunteer work, and personal activities. This type of survey seeks to explain the specific ways in which societies organize their time, with a view to ascertaining how social groups determine people's time use (Delfino, 2009).

Time-use surveys are highly relevant, because they provide inputs for the design, monitoring and evaluation of economic and social equality policies, and for the potential they offer to delve further into different areas of research. These surveys facilitate: (i) analysis of the sexual division of labour and gender inequalities; (ii) studies on the link between monetary poverty, income and the distribution and allocation of time (time poverty); (iii) studies on the relationship between production within the system of national accounts and household production; (iv) measurements of well-being; (v) national, regional and international needs for data on unpaid work; (vi) measurements of all forms of work; and (vii) measurement of the time that people dedicate to the production of goods and services for their own use.

Macroeconomic policy decisions can thus be based not only on traditional measurements such as GDP, but also on the unpaid goods and services produced within households and the community. These types of activity, which are socially and economically invisible and go largely unrecognized, make a major contribution to the well-being of society.

3. Origin of time-use studies

The earliest research on time use was undertaken in the early twentieth century, with "social surveys reporting on the living conditions of working class families" (United Nations, 2004, p. 6) in Great Britain, the United States and the former Union of Soviet Socialist Republics (USSR). According to Benería (2005), the first systematic compilation of data on time use was conducted in the former USSR in 1924, with the aim of obtaining information on leisure and work time in the community. Subsequently, surveys were reported that aimed to study the living conditions of working families, understanding changes in the demographic structure, the expansion of leisure activities, and specific objectives arising from the interest of the media in studying its audiences.

Women's and feminist movements, along with other actors in the international gender agenda, have also played a fundamental role in questioning the exclusive use of variables related to paid work and income. They stress the importance of measuring domestic work in households as a substantive contribution to the economies of industrialized countries. These studies were incorporated into social measurements in order to capture the time devoted to paid work, unremunerated work, care, education and culture (Aguirre and Ferrari, 2014a).

For the social sciences and statistics, these studies meant a break with the traditional, exclusively market-focused, way of measuring work. The specialized literature recognizes Alexander Szalai as having undertaken the first international empirical research project on the use of time, the "Multinational comparative time-budget research project" (1965–1975). The objective of this research was to learn about daily life and the differences between the rural and urban population in 11 European countries, using time-use measurement techniques, such as the activity diary. Countries such as Denmark, France, Holland, Italy, Sweden and the United Kingdom lead this process systematically and gradually incorporated other countries such as Belgium, Finland, Germany, Spain and the United States (Aguirre and Ferrari, 2013).

From the 1970s onwards, time-use studies proliferated in most European countries; and statistical and methodological associations began to be formed to develop standardized measurement criteria. These include the creation in 1970 of the International Association for Time Use Research (IATUR) in Bulgaria, which proposed systems of methodological standards for the application of time-use surveys. In that period, the Statistical Office of the European Union (Eurostat) made a proposal for the standardization of time-use surveys in European countries with the aim of making the results more comparable (Aguirre and Ferrari, 2013).

In Latin America and the Caribbean, time-use measurements began in the 1980s. This tardiness, relative to European countries, is explained partly by the later development and conceptual and academic awareness of the social, economic and political transformations taking place in the labour market and families from a gender perspective; by the later incidence of feminism and institutionalization of the machineries for the advancement of women; and by institutional and management weaknesses of the national statistical offices in incorporating these dimensions in the statistical agenda of countries with meagre resources and scant awareness of the problem.

The first country to undertake time-use measurement in the region was Cuba in 1985.⁷ The Dominican Republic was the second in 1995, followed by Mexico in 1996 and Nicaragua in 1998. However, as will be seen in chapter II, these four countries pursued different paths: Cuba followed up its measurements in 1988, 1997, 2001 and 2016; the Dominican Republic had nine-year intervals between its measurements, the second was conducted in 2006–2007 and the third in 2016. Mexico is the country with the greatest continuity in the implementation of surveys (1996, 1998, 2002, 2009, 2014 and 2019), also making substantive methodological and statistical advances, while Nicaragua did not conduct any further measurement of this type.

Partnerships between the users of the information, the national machineries for the advancement of women, and those who produce the information, namely the national statistical offices, play an important role in the execution of time-use measurements in Latin America and in their application in the design of public policies for gender equality. Among the spaces for dialogue that have been generated, the Working Group on Gender Statistics at the Statistical Conference of the Americas has made it possible to exchange knowledge and strengthen capacities among countries. The Working Group has been an important mechanism of regional and South-South cooperation that facilitated the exchange of experiences and capacity building among officials from the national statistical offices of Latin America and the Caribbean. This work has achieved significant progress in the production, quality and harmonization of time-use statistics. The main outputs of this intergovernmental work include the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL). Another important outcome of the Working Group is the definition of the "Total working time" indicator (average time spent on paid and unpaid work by the population aged 15 years and over, by sex). This is updated continuously and disseminated by Gender Equality Observatory for Latin America and the Caribbean of ECLAC and was approved by the countries of the region at the ninth meeting of the Statistical Conference of the Americas as part of the regional framework of indicators for the statistical monitoring of SDGs in Latin America and the Caribbean.

In 1975 the Cuban Institute of Domestic Demand conducted a time-use survey that foreshadowed the National Time-Use Surveys of 1985 and 1988. The National Statistical Office conducted a Time-use Confidence Survey in 1997 and a Time-Use Survey in 2001. In addition, the Federation of Cuban Women conducted early research on the distribution of household chores and the time spent on them in 1989 and 1991.

An important feature of the regional process is the role played by the specialized academic community and women's organizations in the promotion, stimulus, design and execution of several of these measurements, This has made it possible to mainstream gender in the definition of objectives, the construction of measurement instruments, and the analysis, dissemination and subsequent use of the results. The influence of these actors on time-use measurements is key to understanding the impact of these findings on public policy formulation, specifically in equality plans and care policies.

4. Background on methodological guidelines on time-use measurements

Background material for this guide includes at least two methodological guides on time-use measurements, produced by the United Nations. The first of these, *Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work*, published in 2004, was intended to present an overview of the different approaches adopted in the design of time-use surveys and the collection and dissemination of data (United Nations, 2004). This is a response to the growing demand from countries requesting the development of guidelines and methodologies for conducting national surveys, and provides input on the positive aspects and risks of deploying each of the methodological components. This guide, which is in the process of being updated, incorporates global contributions and reflections on the harmonization of time-use measurements that have served as inputs for preparing this document.

In 2010, based on an in-depth review of time-use surveys, the Conference of European Statisticians (CES) highlighted the need to improve the comparability of measurements between countries, and to develop a practical guide for their implementation. To this end, a working group was created and produced *Guidelines for Harmonizing Time-Use Surveys*, which was published in 2013 by the Economic Commission for Europe (UNECE). This aims to guide the design and implementation of time-use surveys; improve the international comparability of their findings; and include best practice recommendations based on the experiences of UNECE member countries and other developed nations participating in the work of CES.

Another recognized forerunner is the document prepared by Milosavljevic and Tacla (2007) *Incorporando un módulo de uso del tiempo a las encuestas de hogares: restricciones y potencialidades*, which was produced as part of ECLAC's work to promote the implementation of time-use surveys in the region. The document was presented initially as a working paper at the regional meeting, titled "Time-use surveys: their design and application", held in 2005. The comments and discussions that took place on this occasion resulted in the final publication in 2007, which presents the background of this type of survey, its objectives and the alternatives for conducting them. It also analyses the results of the surveys existing in the region during that period; and, lastly, it makes a proposal for including a basic supplementary module on time use in the household surveys (Milosavljevic and Tacla, 2007).

In the framework of the Working Group on Gender Statistics, Gómez Luna (2010) presented the document *Guidelines and conceptual references for harmonizing time-use surveys in Latin America and the Caribbean.* This proposal summarizes the first regional guidelines for strengthening the quality of information, international comparability, and the analysis and use of gender-sensitive information. Subsequently, Rosario Aguirre and Fernanda Ferrari published *Surveys on time use and unpaid work in Latin America and the Caribbean: Experience to date and challenges for the future* (Aguirre and Ferrari, 2013). This publication presents the latest advances in time-use surveys in the region with an analysis of some national experiences and challenges for the future.

In 2018, the Division for Gender Affairs of ECLAC contacted the national statistical offices of the region's countries to request inputs for the production of this guide; and 15 of them provided important contributions from their national experiences in time-use measurements. Capitalizing on these advances, this document synthesizes the experiences and lessons learned on time-use measurement by the countries of the region, to guide decision-making that takes account of regional particularities.

The Spanish version of this guide was published in 2006.

⁹ This document was prepared for the Division for Gender Affairs of ECLAC and was published in 2014.

Chapter II

The state of the art in time-use measurements in Latin American and Caribbean countries

This chapter systemizes the different instruments used in the region to compile information on time use and unpaid work. It identifies the similarities and differences in the methodological approaches adopted by the countries and, wherever possible, how they have evolved over time based on the available information.

In most cases, the period considered for the systemization runs from 2007 to 2020. However, mention is also made of a number of specific earlier experiences that are considered relevant. Measurements from the specified period are analysed in greater detail, since methodological information has been more widely available and time-use data have been collected more frequently in the countries since 2007.

Moreover, in that year the Working Group on Gender Statistics at the Statistical Conference of the Americas was created, which promoted many initiatives for the production and analysis of gender and time-use statistics in the countries of Latin America and the Caribbean (ECLAC, 2007b). The work of this group provided a framework for the main regional mechanisms for discussing and strengthening technical, methodological and analytical capacities in time-use statistics (see box II.1). It has played a key role in the region's methodological progress, in raising awareness of the importance of this type of information for the design of public policies and, consequently, in increasing the number and quality of measurements. The year of its creation thus marks a milestone in the history of time-use statistics in the region, further justifying the choice of 2007 as the starting point for most of the analyses in this systemization exercise.

The Working Group on Gender Statistics coordinated inter-agency work, provided technical assistance and training to the National Statistical Offices (NSOs) and the machineries for the advancement of women and promoted horizontal technical cooperation. It has also consolidated discussion mechanisms in which to share knowledge and good practices aimed at strengthening national capacities, such as the SCA Knowledge Transfer Network.... See [online] https://rtc-cea.cepal.org/en/working-group/gender-statistics/2018–2019.

The International Meetings of Specialists on Time Use and Unpaid Work (18 annual meetings) and the International Meetings on Gender Statistics, which have been held continuously for 21 years, encourage reflection and the exchange of good practices among the countries of the region. The Division for Gender Affairs of ECLAC, UN-Women, the National Institute of Statistics and Geography (INEGI) and the National Women's Institute of Mexico have supported these activities systematically.

Box II.1

Experience of South-South cooperation for time-use measurement in Paraguay

At the sixteenth International Meeting on Gender Statistics, held in Aguascalientes, Mexico, in 2015, a South-South cooperation mechanism was set up to support Paraguay's first national time-use survey. This involved participation by representatives of the National Institute of Statistics (INE) of Paraguay, the National Women's Institute (INMUJERES) of Mexico and INMUJERES of Uruguay, under the auspices of UN-Women and ECLAC.

Subsequently, a technical meeting was held to transfer the methodology of the Time-Use Survey and to review the instrument that had been designed for data collection. A work schedule was drawn up for the national institutions; and in 2016 the instrument was conceptually designed and developed, based on the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL). Technical consultations were then held with representatives from Chile, Mexico and Uruguay, together with ECLAC; and a pilot test was conducted with technical support from the National Institute of Statistics (INE) of Uruguay, with UN-Women in an observer role. Lastly, a training activity was held for field personnel; and the implementation of the Time-Use Survey began, with technical assistance from the National Institute of Statistics and Geography (INEGI) of Mexico.

Source: E. Barrios, "Encuesta sobre uso del tiempo en Paraguay", document presented at the Sixteenth International Meeting of Specialists on Time Use and Unpaid Work, Aguascalientes, 4-5 September 2018 [online] http://cedoc.inmujeres.gob.mx/documentos_download/RUT2018/S3-6-ElizabethBarrios.pdf.

This chapter also gives details of the time-use measurements planned in a number of countries for 2020–2024. It is hoped that this methodological guide will be used to support these surveys and that the countries deploying it will share their impressions and suggestions.

Preparation of the following systemization made use of the ECLAC Repository of information on time use in Latin America and the Caribbean (ECLAC, 2021a). This contains the data provided by the region's countries; the answers given by the countries to two questionnaires sent to them, one in 2018 and the other in 2020; and the information available on the official websites of the respective governments. Despite this exhaustive research, it proved impossible to find certain methodological data for some statistical surveys. Accordingly, each of the analyses explicitly mentions the measurements included in each specific evaluation.

To date, 23 countries in the region have made at least one measurement of the time spent on domestic and care work, while 10 have made economic valuations of the unpaid work of households, and five have calculated the corresponding satellite account. Table II.1 reports on this data gathering process at the regional level, listing only official measurements tasked with the agencies in charge of producing official statistics for their countries and, for a city, in the case of the Department of Statistics and Censuses of the Government of the City of Buenos Aires. Therefore, only 22 countries are included in table II.1 and not 23. This is because, at the time the guide was finalized, it had not been confirmed whether the data collected in the set of time-use questions applied in Grenada in 2021 would be used as official statistical information. Table II.2 lists all of the pilot surveys that were identified in the region.

Table II.1 Latin America and the Caribbean (22 countries): official time-use measurements by type of data collection, 1985–2020

Countries	Date	Name	Data collection method	Data collection mode	Reference period
Argentina	2016	Survey of time use in the City of Buenos Aires ^a	Stand-alone survey	Diary	Previous day (10 min. interval)
	2013	Question set in the Annual Survey of Urban Households (EAHU)	Question set	List	Previous day
	2005	Survey of time use in the City of Buenos Aires, module of the Annual Household Survey ^a	Module	Diary	Previous day (30 min. interval)
Bolivia (Plurinational State of)	2001	Question set in the Continuous Household Survey of the Programme for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI)	Question set	List	Previous week
Brazil	2012-2019 ^b	Question set in the module on other forms of work in the Continuous National Household Survey (PNAD-C)	Question set	List	Reference week
	1992–2015	Question set in the National Household Survey (PNAD)	Question set	List	Reference week
Chile	2015	National Time-Use Survey	Stand-alone survey	List	One specific weekday and one weekend day
	2007–2008	Experimental Survey on Time Use in Greater Santiago	Stand-alone survey	Diary	Previous day (30 min. interval)
Colombia	2012–2013, 2016–2017, 2020–2021	National Time-Use Survey (TUS)	Stand-alone survey	List	Previous day
	2007–2021	Question set in the Comprehensive Survey of Households (GEIH)	Question set	List	Previous week
Costa Rica	2017	National Time-Use Survey	Survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2011	Survey on Time Use in the Greater Metropolitan Area	Survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2004	Module in the Multipurpose Household Survey	Module	List	Previous week
Cuba	2016	Module on time use and care in the National Survey on Gender Equality (ENIG)	Module	List	Previous week
	2001	Time-Use Survey ^c	Stand-alone survey	Diary	Typical and non-typical days (10 min. interval)
	1997	Time-Use Confidence Survey	Stand-alone survey	Diary	Not available
	1985 and 1988	National Time-Use Survey	Stand-alone survey	Diary	Not available
Dominica	2001 and 2011	Question in the Population and Housing Census	Question	List	Previous week
Dominican Republic	2016	Module on time use in the National Multipurpose Household Survey	Module	List	Previous week
	2006–2007	Question set in the Demographic and Health Survey (ENDESA)	Question set	List	Not available
	1995	National Time-Use Survey	Stand-alone survey	Diary	Previous day
Ecuador	2012	Time-Use Survey (TUS)	Stand-alone survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2005, 2007, 2010, 2012, 2015, 2016 and 2017	Module in the National Survey of Employment, Unemployment and Underemployment (ENEMDU)	Module	List	Previous week
	2003 and 2004	Question set in the National Survey of Employment, Unemployment and Underemployment (ENEMDU)	Question set	List	Not available
El Salvador	2017	National Time-Use Survey	Stand-alone survey	List	Previous day and last weekend
	2010–2011	Module in the Multipurpose Household Survey (EHPM)	Module	List	Previous day
	2005	Question set in the Multipurpose Household Survey (EHPM)	Question set	List	Previous day
Guatemala	2014, 2017, 2018 and 2019	Module in the National Survey of Employment and Income (ENEI)	Module	List	Previous day
	2000, 2006, 2011 and 2014	Module in the National Survey of Living Conditions (ENCOVI)	Module	List	Previous day
Honduras	2009	Question set in the Permanent Multipurpose Household Survey	Question set	List	Previous day

Table II.1 (concluded)

Countries	Date	Name	Data collection method	Data collection mode	Reference period
Jamaica	2018	Module in the Survey of Living Conditions	Module	List	Previous day
Mexico	2009, 2014 and 2019	National Time-Use Survey (ENUT)	Survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2015	Question set in the Inter-census Survey	Question set	List	Previous week
	2008, 2010, 2012, 2014, 2016 and 2018	Question set in the socioeconomic conditions module (MCS) of the National Household Income and Expenditure Survey (ENIGH)	Question set	List	Previous week
	From 2005 to 2020	Question set in the National Occupation and Employment Survey (ENOE)	Question set	List	Previous week
	2002	Module in the National Household Survey on Living Standards Measurement (ENHMNV)	Module	List	Previous week Monday–Friday, and Saturday and Sunday
	1998	Module in the National Household Survey on Living Standards Measurement (ENHMNV)	Module	Diary	Previous day
	1996	Module in the National Survey on Work, Contributions and Time Use (ENTAUT)	Module	List	Previous week Monday–Friday, and Saturday and Sunday
Nicaragua	1998	Module in the National Household Survey on Living Standards Measurement (ENHMNV)	Module	List	Previous day
Panama	2011	National Time-Use Survey	Stand-alone survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2006	Time-Use measurement in the Multipurpose Survey ^d	Not available	Not available	Not available
Paraguay	2016	Time-Use Survey (TUS)	Stand-alone survey	List	Previous week Monday–Friday, and Saturday and Sunday
Peru	2010	National Time-Use Survey	Stand-alone survey	List	Previous week Monday–Friday, and Saturday and Sunday
	2006	Time-Use measurement in the Continuous Household Survey ^d	Not available	Not available	Not available
Trinidad and Tobago	2000	Module in the Population and Housing Census	Module	List	Previous day
Uruguay	2013	Module in the Continuous Household Survey	Module	List	Previous day
	2007	Module in the Continuous Household Survey Module in the Continuous Household Survey	Module	List	One working day and one non-working day
Venezuela (Bolivarian	2011	Time-Use Survey ^d	Survey	Diary	Previous day (10 min. interval)
Republic of)	2008	Time-Use measurement ^d	Not available	Not available	Not available

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Repository of information on time use in Latin America and the Caribbean", 2021 [online] https://oig.cepal.org/sites/default/files/c2100833_web.pdf.

Notes: The table lists the measurements performed by the official agencies tasked with conducting the surveys in the country, or the city in the case of the Autonomous City of Buenos Aires.

^a Surveys conducted by the Department of Statistics and Censuses of the Government of the City of Buenos Aires, the agency that coordinates and directs the services that comprise the city's statistical system (SEC), in addition to conducting censuses and surveys within the city's geographical boundaries.

^b The results have been published since 2016.

^c Survey conducted in rural and urban areas of the following five municipalities in Cuba: Pinar del Río, San Juan y Martínez, Habana Vieja, Bayamo and Guisa.

d It was impossible to obtain details on the type of survey, mode of collection, reference period or any other information about these measurements. For this reason, they are referred to generically as "time-use measurements" without further specification.

Table II.2
Latin America (6 countries): pilot tests of time use measurement

of Buenos Aires.

Countries	Date	Name	Mode of collection	Reference period
Argentina	2019	Trial questionnaire conducted in six municipalities and six neighbourhoods of the Autonomous City of Buenos Aires	Diary	Previous day (10 min. interval)
	2016	Pilot test survey of time use in the City of Buenos Aires ^a	Diary of activities (50% of the sample); List of activities (50% of the sample)	Previous day (10 min. interval)
Bolivia	2019	Time-use survey pilot test	Diary of activities and list of activities	Previous day (10 min. interval)
(Plurinational State of)	2010–2011	Household time-use survey pilot test	Diary	One weekday and one weekend day
Brazil	2009–2010	Pilot module on time use in the pilot test of the Continuous National Household Survey (PNAD-C)	Diary	Random day (15 min. interval)
Cuba	2015	Pilot of the module on time use and care in the National Survey on Gender Equality (ENIG)	List	Previous week
Grenada	2021	Question set in the labour force surveys	List	Previous day
Peru	2010	Pilot time-use survey	Not available	Not available

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Repository of information on time use in Latin America and the Caribbean", 2021 [online] https://oig.cepal.org/sites/default/files/c2100833_web.pdf.

Note: The table lists the pilot surveys carried out by the official agencies tasked with conducting the surveys in the country, or the city in the case of the Autonomous City

Tables II.1 and II.2 present pilot surveys or instrument tests separately from the final measurements. The national statistical offices (NSOs) use these types of exercise widely to evaluate or test different elements of the survey, in order to detect possible flaws or problems and, in some circumstances, to compare methodologies. However, since this is a preliminary and unofficial methodological exercise, some NSOs prefer not to publish their findings and analysis. This reduces the availability of detailed information on all of the experiences of this type carried out in the region; and it also prevents making an exhaustive compilation of them, as has been done with the final surveys. For this reason, the pilot surveys or instrument tests that were found in the research process for this systemization are detailed separately from the final surveys and will be illustrated only in specific circumstances.

As described below, different methodological issues were tested in some pilot surveys, which made it possible to subsequently evaluate each of them and verify which one best met the needs and specifics of the measurement in question. The results of these evaluations can serve as a learning experience for institutions planning their next measurement, which justifies considering these testing exercises in this chapter.

When documenting the latest advances in time-use measurements, as presented here, it is not intended to compare the methods used and decide which is, or has been, the most suitable. Such an assessment is not feasible given the complexities involved in each type of measurement. Instead, the chapter explores and illustrates the multiple dimensions of the measurements that have been implemented in the region, highlighting, where possible, the lessons learned from their use as reported by the countries.³

A. First time-use measurement surveys in the region

As mentioned in chapter I, time-use measurements in the Latin American and Caribbean region began in the 1980s, later than in Europe.

To date, 23 countries have implemented measurements of time use and unpaid work in Latin America and the Caribbean (see tables II.1 and II.2). This group of measurements display heterogeneities and differences in terms of the type of instrument used, the collection method and mechanism, methodology, target population,

^a Pilot survey conducted by the Department of Statistics and Censuses of the Government of the City of Buenos Aires, the body that coordinates and directs the services that comprise the city's statistical system, in addition to conducting censuses and surveys within the city's geographical boundaries.

Details of the decision process regarding the specific factors to be taken into account for the correct measurement of time use and the advantages and disadvantages of each methodology are discussed in chapter IV.

survey objectives, legal foundations, executing agencies and associated institutions, geographic coverage, number of questions and selection of indicators, among others.

Cuba was the regional pioneer when it conducted the National Time-Use Survey in 1985 and its second edition in 1988. Ten years after the first Cuban experience, the Dominican Republic conducted its National Time-Use Survey (Araya, 2003; Reyes, 2017). Mexico implemented the National Survey on Work, Contributions and Time Use (ENTAUT) as a module associated with the National Household Income and Expenditure Survey (ENIGH) in 1996, and the National Time-Use Survey (ENUT) in the same module format associated with ENIGH in 1998. Cuba conducted the Time-Use Confidence Survey in 1997; and Nicaragua included a time-use module in the National Household Living Standards Survey in 1998. Since 1992, Brazil has included two questions on participation in domestic work in the National Household Survey (PNAD); and, in 2001, it added a question on the time spent performing these tasks.

In the first half of the 2000 decade, the first time-use measurements were carried out in Guatemala and Trinidad and Tobago (2000), the Plurinational State of Bolivia (2001), Dominica (2001), Ecuador (2003), Costa Rica (2004), Argentina (2005)⁵ and El Salvador (2005); while Mexico (2002 and 2005), Cuba (2001) and Brazil continued their earlier surveys.

A further 10 countries made their first measurements as from 2006: Panama and Peru (2006), Colombia and Uruguay (2007), Chile (2007–2008), the Bolivarian Republic of Venezuela (2008), Honduras (2011), Paraguay (2016), Jamaica (2018) and Grenada (2021); while the pioneer countries, apart from Nicaragua and Trinidad and Tobago, continued to conduct new measurements.

With the exception of the Autonomous City of Buenos Aires, these measurements were implemented by NSOs, in conjunction with the machineries for the advancement of women and, in specific cases, with support from academic institutions, provincial and local entities or international organizations.

In Latin America, the national machineries for the advancement of women have played a fundamental role in the official surveys, participating as advisory bodies to NSOs and as the main users and promoters of time-use measurements. The collaboration between national machineries for the advancement of women and NSOs has made it possible to mainstream gender in the instruments used for this type of measurement. This has paved the way for the inclusion and deeper analysis of the topic of care, which is a specific feature that should be highlighted in comparison with other regions of the world. Another factor that has strengthened synergies between NSOs and the national machineries for the advancement of women has been the creation, in some countries, of mechanisms for integrating and processing statistics and analysing data, incorporated into the institutional framework of the national mechanisms. This qualifies them for interaction with NSOs.

These institutions have been joined by the United Nations agencies that promote the gender agenda (mainly UN-Women, the United Nations Population Fund (UNFPA) and ECLAC) along with the academic community specialized in gender or population issues. These partnerships have been highly valued, since they enhance the performance of the measurements in question, by articulating the specific experience of the various actors. International organizations have played a preponderant role in providing technical assistance and training, and have also funded some of these experiences. However, it is worth noting the financing provided by national governments, which does more to guarantee the continuity and institutionalization of these measurements. In most cases, the entities responsible for the measurement are the national statistical offices and the national machineries for the advancement of women.

Cuba conducted several qualitative studies related to time use measurement before the 1985 survey. These included the Women's Time Budget Investigation (1975), the National Time Budget Investigation (1975) and the Cuban Population Time Budget Study (1979).

⁵ In Argentina, this corresponds to the time use module incorporated into the 2005 Annual Household Survey of the Autonomous City of Buenos Aires conducted by the Department of Statistics and Censuses of the Government of the City of Buenos Aires.



Map II.1 Latin America and the Caribbean (23 countries): first measurements of time use and unpaid work

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Repository of information on time use in Latin America and the Caribbean", 2021 [online] https://oig.cepal.org/sites/default/files/c2100833_web.pdf.

In some of the region's countries, the academic community has conducted its own time-use studies.⁶ Although these are not included in the analysis proposed in this chapter, they have been fundamental both for making unpaid care work visible and, in some cases, for calculating the value of unpaid work in the satellite accounts of the system of national accounts.

In general, time-use measurements in the region first emerged with the aim of measuring and shining a light on unpaid work and its unequal distribution between men and women. Subsequently, gaining an understanding of the link between unpaid and paid work and the construction of indicators associated with total work time were included as objectives. Time-use measurements have also been used to measure all forms of work, in accordance with the new definitions of work, which traditionally are not captured in employment surveys. They have also been used to estimate time poverty. These objectives respond to the need to compile conclusive quantitative information on the inequalities and gender gaps that exist in the region, in relation to the different forms of work (paid and unpaid). They also aim to reveal the multitude of forms of unpaid work within households (domestic chores, care, subsistence, community, among others), which are essential for the functioning of other economic

In Uruguay, the first measurement was carried out in 2003 through a stand-alone survey for Montevideo and the metropolitan area, applied by the Department of Sociology of the Faculty of Social Sciences of the University of the Republic and financed with university funds. In Argentina in 2010, the Faculty of Economics and Statistics of the National University of Rosario implemented the Survey of Time Use and Volunteering in the City of Rosario. In 2011, the Institute for Social Studies on Population (IDESPO) of the National University of Costa Rica conducted a stand-alone survey. In 2006–2007, the Centre for Social and Demographic Studies (CESDEM) of the Dominican Republic conducted a measurement similar to those mentioned above.

activities and the generation of well-being. In recent years, the scope of these objectives has been extended to include contributing to the formulation, evaluation and design of public policies and, more recently, to include the calculation of unpaid work satellite accounts.⁷

In accordance with the developments described above, the Dominican Republic (1995) (the first survey with information available on objectives), restricts its objectives to estimating unpaid work (Araya, 2003). In contrast, the next measurement, the 1996 ENIGH module in Mexico, included the first two dimensions of analysis mentioned. It should also be noted that in Mexico, reference to the valuation of unpaid work was explicitly proposed as an objective for the satellite account, given its close link to paid work.⁸ Apart from Mexico's experiences in 1996, 1998 and 2002, reference to the valuation of unpaid work was uncommon.⁹

B. Types of data collection

Three data collection modalities are used in the region: stand-alone surveys; time-use modules included either in household, employment and unemployment or multi-purpose surveys, or else in censuses; and question sets.¹⁰

Before describing the countries' experiences in these modalities, it is worth noting that there is no consensus in the region on the distinction between module and question set . For this reason, some countries reported having implemented modules, when the number of questions included would be too few to be considered as forming a module, and it would be more appropriate to consider them as a question set. Some countries reported the use of modules in the case of four or five questions on time-use activities and also as an instrument containing 110 questions (see table II.3).

Table II.3
Latin America and the Caribbean: heterogeneity in time-use measurements according to number of questions and level of disaggregation of the activities

	Year	Data collection method	Paid work	Unpaid work				Personal activities	
Country			(1) Employment and related activities	(2) Production of goods for own-use	(3) Unpaid domestic work for own household	(4) Unpaid care work by members of the household	(5) Unpaid work for other households or community and voluntary work	(6), (7), (8), (9) Personal activities	Total
Argentina	2013	Questions	2	0	1	2	2	0	7
Brazil	2001	Questions	3	1	1		1	0	6
	2016	Questions	3	4	1		1	0	9
Chile	2015	Stand-alone survey	13	12	11	6	4	24	70
Colombia	2012	Stand-alone survey	13	7	16	13	13	26	88
	2017	Stand-alone survey	13	9	21	14	17	31	105
Costa Rica	2017	Stand-alone survey	5	9	32	34	19	30	129
	2011	Stand-alone survey	5	10	40	32	20	24	131
Dominican Republic	2017	Module	4	1	1	1	1	9	17
Ecuador	2012	Stand-alone survey	2	30	42	24	5	26	129
El Salvador	2010	Module	2	2	10	16	7	10	47
	2017	Stand-alone survey	4	9	15	21	9	12	70

One of the recent conceptualizations of the feminist economics literature is the care economy. Rodríguez Enríquez (2005) defines the care economy as the relationship between the way societies organize the care of their members and the functioning of the economic system (p. 2). The review of the objectives reported by the countries made no reference to the term "care economy", although the dimensions it encompasses were mentioned. Law No. 1413 of 2010, which regulates the inclusion of the Care Economy in the System of National Accounts, does include the care economy, consisting of unpaid household work, in the country's System of National Accounts. This aims to measure women's contribution to the country's economic and social development, and serve as a fundamental tool for the definition and implementation of public policies in Colombia (Colombia, 2010).

⁸ With the data available from that survey, the country produced its first satellite account of unpaid work in households in 2011 (INEGI, 2018).

Since 2009, there has been a favourable climate for promoting unpaid work satellite accounts, stimulated by the wide dissemination of the *Report by the Commission* on the Measurement of Economic Performance and Social Progress (Stiglitz, Sen and Fitoussi, 2009) among national account specialists and their growing interest in satellite accounts (Aguirre and Ferrari, 2013). Similarly, in 2010, the countries of Latin America and the Caribbean agreed in the Brasilia Consensus to encourage the establishment, in national accounts, of a satellite account for unpaid domestic and care work performed by women(see table (ECLAC, 2010, p. 4).

In the case of Dominica in 2010, only one question was included.

Table II.3 (concluded)

Country	Year	Data collection method	Paid work	Unpaid work				Personal activities	
			(1) Employment and related activities	(2) Production of goods for own-use	(3) Unpaid domestic work for own household	(4) Unpaid care work by members of the household	(5) Unpaid work for other households or community and voluntary work	(6), (7), (8), (9) Personal activities	Total
Guatemala	2014	Module	1	2	6	3	1	0	13
	2017	Module	1	2	6	3	1	0	13
Honduras	2009	Questions	1	0	1	1	0	3	6
Mexico	2009	Stand-alone survey	3	7	27	18	3	12	70
	2014	Stand-alone survey	3	10	35	26	8	17	99
Panama	2011	Stand-alone survey	2	11	39	20	12	29	113
Paraguay	2016	Stand-alone survey	5	6	9	29	2	6	57
Peru	2010	Stand-alone survey	5	11	55	24	16	27	138
Uruguay	2013	Module	2	1	10	26	11	7	57
Average number of stand-alone surveys			6	11	28	22	11	22	100
Average number of modules			2	2	7	10	4	5	29
Average number of questions			2	1	1	1	1	1	7

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of I. Vaca Trigo, "Minimum list of activities for light diaries and stylized questions".

Vaca Trigo, "Minimum list of activities for light diaries and stylized questions", document presented at the Third Meeting of the Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics, New York, 4–6 November 2019 [online] https://unstats.un.org/unsd/demographic-social/meetings/2019/newyork-egm-tus-nov/ECLAC.pdf.

Note: The numbers shown in the column headings correspond to the activity code of the broad one-digit CAUTAL divisions.

Thus, in order to systemize the regional experiences in a way that is better suited to the characteristics of each case, the question set has been defined as a modality that captures time-use data with respect to a maximum of 10 activities, and is contained in a module or specific section on time use or some other topic. Both the module and the question set are anchored in a larger statistical project, such as a household, employment or multi-purpose survey. However, the module captures the phenomenon more precisely and robustly; and it requires a larger number of questions and levels of disaggregation of the activities.

In terms of the distribution of the measurements by data collection method, most experiences use surveys and modules, while the question set has been used less often.

Cuba (in 1985, 1988, 1997) and the Dominican Republic in 1995) obtained measurements through stand-alone surveys; Mexico (in 1996 and 1998) and Nicaragua (in 1998) used time-use modules, the modality most widely used in the 1990s. Brazil was the only country to report having included a question set in its household survey in that period.

The countries that have applied a question set are: Argentina, Brazil, Colombia, the Dominican Republic, Ecuador, El Salvador, Grenada, Honduras, Mexico, Peru and the Plurinational State of Bolivia. In addition, Dominica included a question on time use in its population and housing census in 2001 and 2011. Coverage in all cases is national, since these questions are generally inserted into national surveys conducted for other purposes. In most of these countries, measurements of time-use and unpaid work started by including a few questions in household surveys designed with other aims in mind.

In Brazil, measurements based on questions about participation have been used since 1992; however, a question on the time spent on household chores was not included until 2001 in the National Household Sample Survey (PNAD). In 2012 the number of questions and range of activities was expanded and included in the "Other forms of work" module (which encompasses domestic work, care work, production for own-use and volunteer work) in the Continuous National Household Survey (PNAD-C). It is important to note that although it is called a module, the analysis of Brazil in PNAD-C has been considered as a question set in this systemization. This is because, as shown in table II.3, it has nine questions on time-use, thus falling within the definition provided earlier in this chapter. In contrast, the pilot test applied in 2009–2010 as part of PNAD-C in five of the country's federative units has been considered as a module.

¹¹ The results of this measurement have been published since 2016.

In the case of Ecuador, measurements began in 2003 with four questions included in the National Survey of Employment, Unemployment and Underemployment (ENEMDU), with the number rising to nine in 2004. In 2005, the first time-use module was implemented in the latter survey. Costa Rica in 2004 and the Autonomous City of Buenos Aires, Argentina, in 2005, also applied modules during the early years of the 2000 decade (in 2004 and 2005, respectively).

The modules were implemented in 12 of the countries for which information is available: Argentina, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Jamaica, Nicaragua, Mexico, Trinidad and Tobago and Uruguay. Of these experiences, only one has formed part of a census, while all of the rest were included in some type of survey. Ecuador and Guatemala are the countries that made the greatest use of modules as the data collection method. Coverage during the period was national in all cases, except for Argentina's measurement in the City of Buenos Aires in 2005.

In Latin America and the Caribbean, stand-alone surveys started to become more frequent in the 2010 decade. Prior to that, the countries that used this type of survey were Cuba (in 1985, 1988, 1997 and 2001), the Dominican Republic (in 1995) and Nicaragua (1 in 998).

In 2009–2020, seventeen stand-alone surveys were carried out in 11 countries: Argentina (1), ¹² the Bolivarian Republic of Venezuela (1), Chile (2), Colombia (3), Costa Rica (2), Ecuador (1), El Salvador (1), Mexico (3), Paraguay (1), Panama (1) and Peru (1). Apart from those implemented in Argentina (in 2016), Chile (in 2007–2008), Costa Rica (in 2011) and Cuba (in 2001), all had national coverage. It can therefore be said that the stand-alone surveys implemented in the region also tended to be of national scope.

A comparison of the frequency with which modules and stand-alone surveys have been applied in the region shows that modules have allowed for better periodicity in time-use measurements. Considering the relationship between the proposed objectives and the type of survey, in very general terms, it can be said that stand-alone surveys pursue objectives linked more closely to the generation of information for public policy formulation and for the calculation of satellite accounts.

Table II.3 illustrates the heterogeneity of time-use surveys, in terms of the number of questions used and the level of disaggregation of the activities of some of the surveys conducted in the region up to 2017. Data on the average number of questions formulated when using the different methods show that stand-alone surveys allow for the greatest disaggregation of activities and are, therefore, the most exhaustive. In particular, they provide more information on domestic and unpaid care work activities. The latter corroborates what has already been noted repeatedly in this guide, namely the emphasis placed in the region on obtaining data on time spent on domestic and unpaid care work.

Although the average number of questions provides clear information on each type of data collection, in some cases the total number of questions in modules collect information on a very similar number of activities as those of stand-alone surveys. For example, the total number of questions in the module used by Uruguay (2013) is similar to the number included in Paraguay's stand-alone survey of 2016. Chapter IV provides a detailed discussion of the advantages and disadvantages of each of the methodological designs available for time-use measurements, which will make it possible to gain a better understanding of the possibilities and limitations of each one.

C. Types of instrument, reference periods, target population and preparatory activities for the field survey used in the region

1. Diary or questionnaire of stylized questions based on an activities list

When considering the data collection instruments, most of the measurement experiences consisted of a questionnaire containing stylized questions based on an activities list. The available information shows that 14 measurements used a diary of activities, of which five were pilot experiences¹³ and nine were final surveys (see tables II.1

¹² In the Autonomous City of Buenos Aires, 2016.

¹³ The following countries have used both instruments (diary and activities list): Argentina in 2019; Brazil in 2009–2010; the Plurinational State of Bolivia in 2010–2011 and 2019; and the Autonomous City of Buenos Aires in 2015.

and I.2).¹⁴ Nine of the 14 were applied as part of a stand-alone survey, while five (Nicaragua and Mexico, 1998; Argentina, 2005; Chile, 2007–2008 and Brazil, 2009–2010) were implemented as modules included in household surveys. In terms of the evolution of the data collection instrument in the region, an analysis of the nine final surveys shows that the activity diary was mostly used in the earliest measurements.

With the exception of the Bolivarian Republic of Venezuela, all countries have conducted at least one measurement using a questionnaire based on an activities list. These have been included in modules, stand-alone surveys and question sets. Two pilot surveys, Argentina in 2016 and the Plurinational State of Bolivia in 2019, used both of the data collection instruments (see map II.2).

Map II.2 Latin America and the Caribbean (23 countries): latest time-use data surveys, by instrument and country, 2007–2021



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Repository of information on time use in Latin America and the Caribbean", 2021 [online] https://oig.cepal.org/sites/default/files/c2100833_web.pdf.

a Pilot measurements.

¹⁴ The Autonomous City of Buenos Aires in 2005 and 2016; Cuba in 1985, 1988, 1997 and 2001; Mexico in 1998; and the Bolivarian Republic of Venezuela in 2011.

2. Reference period

As regards the reference period, all of the measurements made in the region using diaries refer to the previous day. In the three that used diaries in 2007–2020, the time intervals differ: the Plurinational State of Bolivia (in 2010 and 2019) used 10-minute intervals, ¹⁵ Brazil (in 2009–2010) used 15-minute intervals, and Chile (in 2007–2008) used 30-minute intervals.

In the measurements that used a questionnaire with stylized questions based on an activities list, the previous week was used more often as the reference period than the previous day.

(a) Previous day

Considering all of the experiences of time-use measurement in the region with both instruments (diary and activities list), the week and the day have been used in almost equal proportions. As noted above, the previous day is usually asked when diaries are used, whereas both of these reference periods have been used in questionnaires.

The choice of the previous day and its treatment have differed according to whether it refers to working days, non-working days and weekends, typical or atypical days. In some cases (such as Chile in 2015), it was decided to predefine this by sampling all the days of the week and assigning them to households by asking about a specific day. Colombia, in 2016–2017, collected information for 52 consecutive weeks, making visits every day of the week, including weekends and holidays, to ensure that all days were represented.

Uruguay, in 2007, inquired about the last working and the last non-working day, and asked whether it was a typical or atypical day. In this case, it was decided to remind respondents by asking about two types of days with different characteristics. To publish weekly data, each person's hours were multiplied separately for each working day and for each non-working period, which could be either one or two days (Falcon, 2017).

In the case of Chile, the 2007–2008 survey referenced the previous day and asked whether it was a normal day. However, both Chile and Uruguay changed the reference period in their latest measurements. As noted above, Chile in 2015 pre-assigned a specific day, and Uruguay in 2013 referenced the previous day, asking whether it was a working or non-working day. In the latter case, the reference period was limited to a single day instead of two, as had been the case in 2007, because the 2013 form had a larger number of questions, so restricting it to a single day of the week made it shorter and less burdensome for the respondent. Nonetheless, having information for just one day of the week made it more difficult to construct weekly hours. It was decided to design an effective sample with an equal distribution of the days of the week, interviewing the same number of households each day of the week and referencing the day prior to the survey. As the effective sample ultimately proved inequitable because of logistical issues of fieldwork organization, the days were balanced ex post by applying a weighting (Falcon, 2017).

Argentina in 2013 asked about the day before the survey to capture unpaid domestic and care work; and it used the previous week to measure volunteer work.

Costa Rica in 2004 referenced the previous day, but without a sample design to ensure equal representation for each day of the week. The previous day was chosen to prevent responses from referring to a "typical" day's time use, particularly because the persons interviewed were not direct respondents. Data were collected from Monday to Saturday, with those corresponding to Saturday and Sunday being collected on Monday, when the 48 hours of the weekend were analysed. In the 2011 measurement, the reference period was altered by dividing the previous week into two blocks, the first being Monday to Friday, and the second consisting of Saturday and Sunday. This change stemmed from the evaluation of the 2004 experience, the possibility of analysing both time periods and the decision to use direct respondents. Expert recommendations and the experience of other countries were also taken into consideration (Sandoval and Tenorio, 2017).

For the Pilot Test of the Time-Use Survey of the Plurinational State of Bolivia (carried out in 2019), differentiated questionnaires were designed: the household questionnaire (diary-list method), where the diary spanned 24 consecutive hours, divided into 10-minute intervals; and the individual questionnaire (list method), corresponding to the list of activities predefined on the basis of the Classification of Time-use Activities for Latin America and the Caribbean (CAUTAL) (INE, 2019).

(b) Previous week

According to the available information, most of the measurements that referenced the previous week distinguished two periods for the survey: Monday to Friday, and Saturday (Costa Rica in 2001 and 2017; Ecuador in 2012; Mexico in 2019, 2014 and 2009; Panama in 2011; Paraguay in 2016; and Peru in 2010). Cuba, in 2016, inquired about the previous week without distinguishing between days.

3. Target population

In relation to the target population, the minimum age varies from seven years (Plurinational State of Bolivia in 2010; Guatemala in 2011) to 18 years (Argentina in 2013). Minimum ages of 10, 12, 14 and 15 years are frequent. The age range used in time-use measurements corresponds to that used in labour surveys, to ensure consistency in the measurement of total work.

In the vast majority of the measurements conducted in 2007–2020, data were obtained through a direct respondent. Guatemala (2011) specified a minimum age for this, because although its target population was seven years and older, a qualified respondent spoke for those under 12 years of age.

4. Type of respondent

According to the available information, a qualified respondent was used in just five measurements between 2007 and 2020 (the Dominican Republic in 2016; El Salvador in 2017; Paraguay in 2016; and Uruguay in 2007 and 2013). In Argentina in 2013 it was decided to use direct respondents, while allowing the questionnaire to be answered by another household member when it was impossible to contact the individual in question. In such cases, the preferred respondent was the person chiefly responsible for household tasks; failing that, the head of household, spouse or person with most information about the individual who should have been interviewed.

For its modules applied within PNAD-C from 2016 to 2019, Brazil used, as respondent, the person who was in the household at the time of the interview. This person could supply the information for other residents of the household, as long as he or she was older than 10 years of age. Data for the "Other forms of work" module was collected for all persons of at least 14 years of age identified in the household; and, in the case of the 2009–2010 pilot survey, only the person selected for the log could provide the requested information.

In general, the region's time-use measurements mostly collected data from household members who met the requirements of the target population. However, Brazil, in 2009–2010, and the Dominican Republic, in 2016, selected one member aged 10 years or older per household to supply the information.

5. Preparatory activities or activities prior to data collection

Preparatory activities, or those prior to the data collection, include awareness raising with the target population, such as delivering informative leaflets, or visiting the selected households to explain the reasons for the measurements and their importance.

Such preparatory activities are rare in the region, with only four countries reporting their implementation. Brazil's pilot measurement in 2009–2010 included a folder to support data collection, the aim of which was to underscore the importance of the research, its objective, the indicators that would be generated from it and the information that would be used, given the complexity of the research. On two occasions (2012–2013 and 2016–2017) Colombia implemented a sensitization strategy to bolster trust among the population to be interviewed. Information leaflets were distributed, and a visit was made by a sensitization team in which days could be agreed upon for subsequent visits. In Mexico, on three occasions (2009, 2014 and 2019), a prior visit was made by the field workers who distributed a leaflet and a notebook, together with a document that the interviewers used to

introduce themselves and present the project in the selected households. The Dominican Republic, in 2016, also delivered an introductory letter giving information on the survey to be carried out. This letter is standard for all surveys in the country and is used to brief respondents about the mandate of the Statistical Office for this type of operation and to give assurances as to the confidentiality of the data collected.

D. Activity classifications used and treatment of simultaneity

1. Activity classifications

According to the available information, the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) was used in nine measurements, all carried out since 2010 in the following countries: Argentina in 2016 and 2019, Chile in 2015, Costa Rica in 2017, Cuba in 2016, Ecuador in 2012, El Salvador in 2017, Paraguay in 2016 and the Plurinational State of Bolivia in 2010–2011. In addition to CAUTAL, Costa Rica uses the Mexican Classification of Time-Use Activities (CMAUT) based on the International Classification of Activities for Time-Use Statistics (ICATUS);¹⁶ and the Plurinational State of Bolivia has developed its own CAUTAL-based classifier, the Classification of Time-Use Activities of Bolivia (CAUTBOL).

The International Classification of Activities for Time-Use Statistics was used in at least seven countries (Argentina in 2005 with adaptations; Brazil; Colombia in 2012–2013, 2016–2017 and 2020–2021; Ecuador since 2003; Peru in 2010; the Bolivarian Republic of Venezuela in 2011; and Uruguay in 2007 and 2013). Ecuador has been using ICATUS and CMAUT since 2003. In the case of Mexico, the surveys conducted since 2002 are based on CMAUT (INEGI, 2020).

El Salvador in 2010–2011, Honduras in 2009 and Panama in 2011 did not use classifiers. Use of a given type of classifier does not mean that the type of data collection instrument is fixed. Whereas the Dominican Republic, Honduras and Mexico used question sets; El Salvador used a module; and Panama and the city of Rosario in Argentina used stand-alone surveys. No information is available for the other measurements.

In general, there is no correlation between the use of classifiers and the type of instrument or measurement strategy used. Nor is there any harmonization in the use of classifiers in the region, as noted above. For example, Mexico uses a classification prepared specifically to design the questionnaires, both for its stand-alone surveys and for the modules or employment surveys in which stylized questions have been used.

2. Treatment of simultaneity

Simultaneous activities are captured in various ways in the 11 measurements carried out by the countries analysed. As cases of simultaneity generally involve care activities, the respondents are asked whether, while carrying out a given activity, they were also available to provide, or did actively provide, care to other persons. Colombia (in 2012–2013, 2016–2017 and 2020–2021) asked whether the respondent was performing other activities while caring for another person, and which activities he/she performed at the same time. Costa Rica (in 2017) and Peru (in 2010) inquired whether the person was checking on children's homework while performing other activities and whether he/she was looking after other people while performing other activities. Ecuador (in 2012) and Panama (in 2011) also asked whether the person was available to assist persons with disability or looking after young children while performing other activities. Similarly, to capture the simultaneity of activities, Paraguay (in 2016) and Argentina (the Autonomous City of Buenos Aires in 2005 and 2016) inquired whether the person was on hand to provide care while doing other things.

The Mexican Classification of Time-Use Activities (CMAUT) makes it possible to rank the activities on which the population spends time during the course of the day, and is a basic tool for preparing time-use statistics. In addition to its relevance for preparing the household satellite account, it is used to analyse the economic contribution of unpaid work and expose gender inequalities (INEGI, 2015).

In its 2009 survey, Mexico obtained information about simultaneous activities through three questions; one that inquired about the frequency with which the respondent performed two or more activities at the same time, another that inquired about simultaneous activities, and another on passive care. Since 2014, the activities listed in the survey were thoroughly reviewed, adjusting the batteries of questions for each group in conditions of vulnerability (persons with special care needs owing to disability, chronic or temporary illness; care for children aged 0–5 years, 0–14 years, household members aged 15–59 years, and those aged 60 years and over who did not require special care), such that the questions in each block were mutually exclusive (both within the batteries and between blocks), thereby reducing the effect of simultaneity. Accordingly, the 2014 and 2019 national time-use surveys recorded the care provided by each household member aged 12 years or older to all receivers of care in the same category or universe. Passive care was captured through a specific question in each battery, to identify and delineate them by vulnerable group (INEGI, 2020).

E. Data collection method

In 15 measurements performed in 2007–2020, paper forms were used as the physical medium of data collection, and this was the modality most frequently reported. Electronic devices were used in nine cases, all since 2009: Argentina in 2016, Colombia in 2012–2013, 2016–2017 and 2020–2021, Costa Rica in 2017 (see box II.2), Mexico in 2009, 2014 and 2019 (see box II.3) and Uruguay in 2013. The two modalities (paper and electronic devices) were combined in the case of Brazil in 2009–2010.

Box II.2

Costa Rica, National Time-Use survey (ENUT) 2017

In the case of Costa Rica, the data entry system (SICAD), which operates through an electronic questionnaire on a mobile device (tablet), was used to facilitate the interviewers' work, since the device controls the flow of questions and applies the corresponding sections. It also flags errors or inconsistencies that can be corrected during the interview process.

For example, if for some reason the interviewer omitted to record the time in hours and minutes, the alert message would allow the interviewer to corroborate and correct the information. The "yellow or review alerts" do not necessarily indicate errors, but require the interviewers to review the recorded responses and to analyse and corroborate the information before continuing with the interview. The "red or correction alerts" indicate errors that are considered critical and have to be corrected before continuing with the interview.

Another innovative product was an exclusive calculator created to record the distribution of time. For the data collection process, reports were generated with weekly total time ranges, in order to monitor the information obtained. For this purpose, a range of 15% of the total time of 168 hours in a week was established as a criterion for the margin of error of the declared time, which corresponds to an "acceptable" level and therefore does not require any corrective action. If the total weekly time is between 15% and 25% of the 168 hours, it is classified as "alert" for the interviewers and if it exceeds 25%, it is classified as "critical" and requires corrective action.

Another specially designed product was a tool that decided which activities were included or excluded for each question using the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) or CMAUT). This tool was called "Include and exclude" and was incorporated into the interviewer's manual and in the tablet through an informative icon.

The SICAD system is linked to other systems to review and process the data and improve quality. For example, once the data had been collected, the interviewer staff delivered the day's interviews to supervisors, who, through the Survey Administrator System for Supervision (SAES), execute controls to review the data collected by their work group. This system also allows the supervisor to review the quality of the interviews conducted, according to a set of previously programmed rules for inconsistencies; and it facilitates the preparation of reports on the number of interviews conducted by the interviewers.

Source:A. Chaves Villalta, "Encuesta Nacional de Uso del Tiempo (ENUT 2017) Costa Rica", document presented at the Seventeenth International Meeting of Specialists on Time Use and Unpaid Work, Aguascalientes, 10-11 September 2019 [online] https://www.inegi.org.mx/contenidos/eventos/2019/rut/Sesion2/S2M1.AidaChavesfn.pdf.

Box II.3

Mexico, national time-use survey (ENUT) 2014 and 2019

In Mexico's experience, the use of mobile devices and data capture through an electronic system enhances and expedites data capture, in addition to performing their primary validation, by ensuring the correct sequence and consistency of the interview, through passwords, filters and conditions.

The data capture system of the National Time-Use Survey (ENUT) 2014 and 2019 also included a very useful tool, which was innovative for time estimation —a calculator that made it possible to record time (hours and minutes) for each day of the week, as declared by the respondent. In this way, the system performed the calculation of time by reference periods, thereby reducing the error associated with miscalculation by the interviewers.

The mobile device afforded better control over data quality, minimizing the variability of the times captured (out-of-range values) and improving the accuracy of the estimates.

Minimum or maximum allowable values were set for each activity, to identify outliers. When an outlier value was entered, the system sent an alert. The interviewer verified the data recorded with the respondent; if the value was correct, it was maintained, and if it had been entered incorrectly, it was corrected.

The questionnaire captured the main activities, in other words those carried out exclusively (identifiers in the questionnaire and criteria in the interviewer's manual). The questionnaire design placed special emphasis on activities that are well known to be undertaken simultaneously with others, such as entertainment, in order to avoid duplication of time. In addition, owing to the importance that the topic of care is accorded in the National Time-Use Survey, a response category was included in each of the vulnerable groups to capture time dedicated to "passive care" which occurs simultaneously with other activities. This encompasses special care for persons with a disability, chronic or temporary illness; care for household members from 0–14 years of age; and care for household members aged 60 years or older.

Source: National Institute of Statistics and Geography (INEGI), Encuesta Nacional sobre Uso del Tiempo 2014 (ENUT): Documento metodológico, Mexico City, 2015.

F. Dissemination and availability of information

The national statistical offices provide information on time use and unpaid work to the interested public in various formats (see table II.4 and box II.4).

Table II.4
Latin America and the Caribbean (18 countries): dissemination and availability of information from statistical programmes on time use

				Product			
Country	Year	Program name	Questionnaire	Database	Metadata	Presentation of results	Time-use survey website
Argentina	2013	Unpaid work and time-use module in the Annual Survey of Urban Households (EAHU)	√	√	√	√	National Institute of Statistics and Censuses (INDEC)
Bolivia (Plurinational State of)	2001	Module in Household Survey of the Programme for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI)	✓	✓	n/a	n/a	n/a
Brazil	2012	Module in the Continuous National Household Survey (PNAD-C)	✓	n/a	✓	✓	n/a
2016–2019		Module in the Continuous National Household Survey (PNAD-C)	✓	✓	✓	✓	n/a
Chile	2015	National Time-Use Survey	✓	✓	✓	✓	National Institute of Statistics (INE)
Colombia	2012-2013	National Time-Use Survey (ENUT)	✓	✓	✓	✓	National Administrative
	2016–2017		✓	✓	✓	✓	Department of Statistics (DANE)
Costa Rica	2011	Survey on Time Use in the Greater Metropolitan Area	n/a	n/a	n/a		n/a
	2017	National Time-Use Survey	✓	✓	✓	✓	National Institute of Statistics and Census

Table II.4 (concluded)

	Year			Product				
Country		Program name	Questionnaire	Database	Metadata	Presentation of results	Time-use survey website	
Cuba	2016	Module on time use and care in the National Survey on Gender Equality (ENIG)	√	n/a	✓	✓	n/a	
Dominican Republic	2016	Time-use module in the National Multipurpose Household Survey	✓	✓	✓	✓	ONE 2016	
Ecuador	2012	National Time-Use Survey	✓	✓	✓	✓	Ecuador in figures	
El Salvador	2010	Time-use survey module of the Multipurpose Household Survey (MHHS)	✓	n/a	n/a	✓	EHPM 2010	
	2017	National Time-Use Survey	✓	✓	n/a	✓	Time-use survey	
Guatemala	2011	Module in the National Survey of Living Conditions (ENCOVI)	✓	n/a	n/a	✓	n/a	
	2014	Module in the National Survey of Employment and Income (ENEI 1)	✓	✓	n/a	✓	ENEI 2014 April	
	2017	Module in the National Survey of Employment and Income (ENEI 3)	✓	✓	✓	✓	ENEI 2017 December	
Honduras	2009	Time-use module included in the Permanent Multipurpose Household Survey	✓	n/a	✓	✓	EPHPM 2009	
Jamaica	2018	Module in the Survey	✓	n/a	n/a	✓		
Mexico	2009	National Time-Use Survey (ENUT)	✓	✓	✓	✓	National Institute of	
	2014		✓	✓	✓	✓	Statistics and Geography (INEGI) 2009, 2014, 2019	
	2019		✓	✓	✓	✓	(114201) 2003, 2014, 2013	
Panama	2011	National Time-Use Survey	✓	n/a	✓	✓	National Institute of Statistics and Census 2011	
Paraguay	2016	Time-Use Survey	✓	✓	✓	✓	National Institute of Statistics 2016	
Peru	2010	National Time-Use Survey	✓	✓	✓	✓	ENUT 2010 (ANDA-INEI System)	
Uruguay	2007	Module in the Continuous Household Survey	✓	✓	✓	✓	Module UT 2007	
	2013		✓	✓	✓	✓	Module UT 2013	

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Repository of information on time use in Latin America and the Caribbean", 2021 [online] https://oig.cepal.org/sites/default/files/c2100833_web.pdf.

Box II.4

Colombia, innovative tools for dissemination of time-use statistics

The National Administrative Department of Statistics (DANE) has enhanced time-use measurement through dissemination tools and the generation of derived statistics. The simulator of unpaid domestic and care work for the household and the community is a tool that calculates the time spent and the contribution people make to their households and to the country, through the unremunerated work they perform on a daily basis. Calculations are based on the minimum legal monthly wage.

Source: National Administrative Department of Statistics (DANE) (n/d), "Simulador del trabajo doméstico y de cuidado no remunerado para el hogar y la comunidad" [online] https://sitios.dane.gov.co/SimuladorTDCNR/.

G. Institutionalization of time-use measurements

The continuity of time-use measurements depends on whether there is a legal requirement to conduct them and whether they are the institutionalized in national statistical agencies. They need to be part of each country's national statistical system, to guarantee their periodicity and a budget. The institutionalization of measurements remains a challenge in the region, but there are also several good practices in this regard (see table II.5).

^a Although the module on other forms of work was applied from 2012 to 2019, information is available for the years 2016–2019, based on the results of data collected on the visit. Prior to 2016, data collection was one slightly differently so there is no comparable historical series for this information since 2012.

Table II.5
Latin America and the Caribbean (7 countries): examples of rules establishing the collection of time-use data

Country and year	Legal framework for the generation of time-use data		
Argentina, 2019	Law No. 27532, National Time-Use Survey: The National Time-Use Survey is included in the National Statistical System as a module of the Permanent Household Survey (EPH).		
	Art. 6- The National Time-use Survey shall be carried out permanently every two years.		
Argentina, City of Buenos Aires, 2003	Law No. 1168: The Department of Statistics and Censuses of the Government of the City of Buenos Aires shall systematically and periodically investigate the distribution of the use of time.		
Bolivia (Plurinational State of), 2009	Political Constitution of the State, Article 338: The State recognizes the economic value of household work as a source of wealth, and it must be quantified in public accounts. Through a bi-ministerial mandate, the National Institute of Statistics (INE) is instructed to include the measurement of unpaid work among its work areas, raising its profile for the purpose of generating public policies to enable the population to achieve the conditions needed to "live well".		
Colombia, 2010	Law No. 1413 of 2010, which regulates the inclusion of the Care Economy in the System of National Accounts with the aim of measuring women's contribution to the economic and social development of the country and as a fundamental tool for the definition and implementation of public policies, shall ensure that time-use surveys are conducted continuously with the periodicity defined by the National Administrative Department of Statistics (DANE) as the responsible authority. Nonetheless, the interval between one measurement and another may not exceed three years.		
Costa Rica, 2015	Law No. 9325 of October 19, 2015 on accounting for the contribution of unpaid domestic work in Costa Rica: Guarantees the frequency of the time-use survey (the period between one measurement and another may not exceed three years) and specifies how it will be financed.		
Ecuador, 2008	The Political Constitution of Ecuador recognizes the need to quantify and highlight the contribution of care-giving for people, own-use production and self-sustenance.		
Trinidad and Tobago, 1996	Law No. 29 of 1996: provides for periodic surveys to be undertaken on unpaid work.		
Uruguay, 2006	Law No. 18104, Equal Rights between Men and Women: The actions of the National Plan for Equal Opportunities and Rights include conducting studies that quantify and make visible the contribution of women's unpaid work.		

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document and "Care related policies and laws", Gender Equality Observatory for Latin America and the Caribbean, 2021 [online] https://oig.cepal.org/es/leyes/leyes-de-cuidado.

In general, most of these specific regulations commit the countries to measure time use periodically and to guarantee the necessary budget. The first regulation was implemented by Trinidad and Tobago in 1996, for the purpose of valuing unpaid work. The laws of Argentina, Colombia and Costa Rica, which include the time-use measurements mentioned in table II.5, also provide for the valuation of time use and calculation of the unpaid work satellite account. Further details on the valuation of unpaid work and the corresponding regulation are provided in chapter VI. It is essential to have specific regulations that commit the countries to carrying out these measurements periodically and guarantee the required budget. In addition, the information generated needs an appropriate institutional framework for its subsequent processing and dissemination, guaranteeing technical and economic resources for this purpose and considering how its findings will be included in the design and improvement of gender mainstreaming policies. It is, therefore, essential to consolidate a stable institutional architecture that makes it possible to institutionalize time-use measurements.

The regional experience has shown that, in addition to the legal frameworks, best practices involve NSOs working jointly with the national machineries for the advancement of women, and also in conjunction with the academic community specialized in gender, and with organizations linked to the feminist movement and the United Nations. This partnership has made it possible to mainstream gender in the measurements and to include and highlight care work, which is the key to progressing towards gender equality.

H. Projections for future time-use measurements in the region

The situation created by the COVID-19 pandemic still holds unknowns for some countries in the region, so the following systemization is presented for illustrative purposes without implying that the time-use measurements indicated are confirmed (see table II.6).

Table II.6
Latin America and the Caribbean (9 countries): time-use measurements projected for 2020–2024

Country	Type of survey	Type of survey					
Argentina	National Survey on Use of Time and Unpaid Work	Stand-alone survey	2021 (information obtained)				
Chile	Time Use Module in	Module	2022				
	National Time-Use Survey	Stand-alone survey	To be confirmed				
Colombia	National Time-Use Survey	Stand-alone survey	2020-2021 (implemented)				
Costa Rica	National Time-Use Survey	Stand-alone survey	2022				
El Salvador	Household and Multipurpose Survey	Module	2022				
Dominican Republic	Module on time use in the National Multipurpose Household Survey	Module	2021 (information obtained)				
	Time-use survey	Stand-alone survey	2023				
Mexico	National Time-Use Survey (ENUT)	Stand-alone survey	2024				
	National Occupation and Employment Survey (ENOE)	Question set	Continuous				
	National Household Income and Expenditure Survey (ENIGH)		Biennial				
Uruguay	Time-use survey	Stand-alone survey	2021 (information obtained)				

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document.

Box II.5 below presents Argentina's experience with the design and implementation of a pilot test of the National Survey on Time Use and Unpaid Work (ENUT) in 2019.

Box II.5

Argentina; National Survey of Time Use and Unpaid Work (ENUT), 2021

In 2019, the National Institute of Statistics and Censuses (INDEC) undertook specific activities for the project, to obtain nationwide information on measurements of time spent in domestic and unpaid care activities and their economic value in the country.

The design and implementation of the National Time-Use Survey (ENUT) began with an analysis of conceptual and methodological background, evaluating national, regional and international experiences, and making two substantive decisions:

- (i) To highlight the care diamond and the interaction between its constituent institutions (families, State, market and community), according to social and geographic differences.
- (ii) To record the use of time and unpaid work as exhaustively as possible.

A discussion workshop titled "Towards the National Survey on Time-Use and Unpaid Work" was held to design a trial questionnaire; and four discussion panels were held with representatives from the academic community, national and international organizations, the Provincial Directorate of Statistics and specialists in the field, which was a central element for the enrichment of all stages of the statistical process with a view to the 2021 project.

The main experiences of the ENUT 2019 Pilot Test include the use of the activity diary as an efficient measurement strategy; the advantages of conducting a specific survey, and the importance of using technology —in this case mobile devices— as a tool for the quality of statistical data.

Source: National Institute of Statistics and Censuses (INDEC), "Hacia la Encuesta Nacional sobre Uso del Tiempo y Trabajo No Remunerado", Documento de Trabajo INDEC, No. 30, Buenos Aires, 2020.

Box II.6 presents the characteristics of the time-use module in the Household and Multipurpose Survey of El Salvador to be implemented in 2022.

Box II.6

El Salvador, module in the Household and Multi-Purpose Survey

This project is under discussion and is expected to be conducted using a set of stylized questions based on an activities list using the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) classifier with reference to the previous day. The units of observation and analysis will be: the dwelling, the individuals comprising the main household, and the women and men aged 12 years or older who make up the household. The data will be collected using a mobile device. The Division for Gender Affairs of ECLAC will provide technical assistance in the methodological aspects of the survey.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries for the preparation of this document.

Chapter III

Conceptual framework

Designing a time-use survey entails creating an analytical framework to select and organize the time-use activities to be measured, in order to systemize the information collected as far as possible. This choice is a fundamental step in the process of designing the time-use survey, since the conceptual approach adopted will influence the information obtained.

Given the multiplicity of activities that each person can perform, and the diversity of reasons for performing them (for example, a person can fish for work, for pleasure or to support another person), the process of classifying and codifying activities becomes fundamental. Some human activities have already been incorporated into classifiers that have had closely defined objectives. For example, the System of National Accounts (SNA) includes activities that are considered productive, but ignores those carried out within households when there is no economic exchange.

It is also important to be clear about what is of interest to the country conducting the measurement, relative to the public policies to be formulated on the basis of the information; and, for that purpose, to prioritize the methodological approach capable of responding to this demand. Each approach presents limitations and possibilities that have an impact on how the results are used. For this reason, it is important to mention some of the objectives of time-use surveys that have been implemented in the past, especially in Latin America and the Caribbean:

- To obtain information that can be used to estimate and assign a social and economic value to the unpaid work of households, for the purpose of accounting for household production and thus contribute to the construction of the unpaid household work satellite account and, in some cases, the health satellite account.
- To measure work for the market and unpaid household work to assist in the estimation of total work time.
- To generate information on the daily activities undertaken by women and men, with a view to exposing gender gaps.
- To ascertain the time women and men spend caring for household members who are dependent or require special care (those who are sick or have some type of disability), as well as children and the elderly.
- To ascertain the time that men and women spend providing free support to other households in the form
 of unpaid domestic and care work; and the time spent working unpaid in support of the community and
 in voluntary activities.
- To ascertain the time that women and men dedicate to study activities, in order to expose gender gaps.
- To ascertain the time that women and men spend in self-care and recreational or leisure activities.

A. New analytical frameworks for production and work

As a result of globalization, labour flexibility, technological advances, and both financial and economic crises, paid work is undergoing many changes that reflect the diverse modalities of production (Gómez Luna, 2010). The situation is made more complex by changes in the more traditional sexual division of labour —in which men play the role of providers and women are responsible for care and domestic work— as evidenced by women's increasing labour market participation, to mention just one example.

Although female labour market participation has been increasing both globally and regionally, women continue to spend more time than men on domestic and care work, in keeping with the traditional model that maintains a sharp division between the reproductive domain (reproduction of daily life) and productive sphere (wealth production). Despite the sustained increase in women's labour market participation, the conditions in which they participate have remained practically unchanged. The labour market functions without considering the demands it imposes in the sphere of social reproduction, which is where domestic and care work is carried out (ECLAC, 2017a and 2016b; Batthyany and Genta, 2016).

The traditional concepts of production and work (which are within the SNA boundary) are inadequate to represent work done in households, or the inequalities in the distribution of work, or the contributions made by men and women to the economy and well-being.

Societies have functioned and subsisted thanks to the processes of production and reproduction, which are interconnected, since they produce and reproduce people, goods, and relationships. Carrasco (2004) refers to participation in these processes as work, employment or activity and distinguishes three categories: employment, domestic family work and citizen participation work. The first of these is socially assigned to men and is the only paid work of the three; the second is dedicated to the care of human life and is traditionally performed by women; and the third, referred to as volunteering, plays an important role in social cohesion.

In a study of domestic work, Reid (1934) recognized household production, which consists of unpaid activities that are carried out by and for individuals in the household. Such activities may be replaced by market goods or paid services, if circumstances such as income, market conditions or personal preferences make it possible to delegate the service to someone else outside the household. At the same time, she recognized the conceptual difficulty of distinguishing consumption from production in the household and proposed a definition of household production that has market production as a benchmark (Vara, 2006).

The failure to value unpaid activities has not only left women at a social and economic disadvantage, despite the fact that they contribute day after day to the reproduction of the labour force needed to carry out economic activities; even more seriously, it has also left them unprotected and economically dependent, thus making them one of the most vulnerable groups of the population and with the greatest difficulties in accessing social and economic benefits.

It is therefore necessary to consider the different types of work that contribute to social reproduction, by identifying, naming and assigning value to all activities that are essential for human life but have remained hidden without social recognition (Carrasco, 2004). When market production is prioritized over other types of production, many of the activities that support people's well-being are neglected, including domestic family work (Carrasco, 2008, p. 230).

B. The production boundary

The national accounts are a statistical system based on accounting and economic principles, in which a country's economic activities are recorded in monetary terms. Based on this information, indicators are calculated to monitor the behaviour of the economy (for example, economic growth, the unemployment rate and other labour market indicators, along with the rate of inflation or deflation, among other economic imbalances).

In general, two major sets of activities can be distinguished: productive activities, associated with the production of goods and services, and non-productive or personal activities. Productive activities are divided into those for which the results in terms of goods and services are measured within the SNA production boundary; and the production of services performed by household members for their own use, which are excluded from the system of national of accounts, but are within the general production boundary.

The best known indicator obtained from the system of national accounts is gross domestic product (GDP). It is calculated according to a series of recommendations and rules that are accepted by the countries, issued by

the United Nations in conjunction with the Organisation for Economic Co-operation and Development (OECD), the World Bank, the International Monetary Fund (IMF) and the European Commission (United Nations, 2009). The most recent guidelines were published in 2008 (SNA 2008), which superseded the 1993 version (SNA 1993).

The System of National Accounts 2008 provides a definition of activities that are considered as economic production and fall within the "general production boundary".

The activity of production is fundamental. In the SNA, production is understood to be a physical process, carried out under the responsibility, control and management of an institutional unit, in which labour and assets are used to transform inputs of goods and services into outputs of other goods and services. All goods and services produced as outputs must be such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge. The SNA includes within the production boundary all production actually destined for the market, whether for sale or barter. It also includes all goods or services provided free to individual households or collectively to the community by government units or NPISHs [non-profit institutions serving households] (United Nations, 2009, p. 6, para. 1.40).

However, the SNA production boundary is narrower, and includes the following activities:

- (a) The production of all goods or services that are supplied to units other than their producers, or intended to be so supplied, including the production of goods or services used up in the process of producing such goods or services;
- (b) The own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation;
- (c) The own-account production of knowledge-capturing products that are retained by their producers for their own final consumption or gross capital formation but excluding (by convention) such products produced by households for their own use;
- (d) The own-account production of housing services by owner-occupiers; and
- (e) The production of domestic and personal services by employing paid domestic staff (United Nations, 2009, p. 98, para. 6.27).

Nonetheless, services generated in households have been excluded from the national accounts when they are produced by household members and consumed within the same household; the excluded services are the following:

- (a) The cleaning, decoration and maintenance of the dwelling occupied by the household, including small repairs of a kind usually carried out by tenants as well as owners;
- (b) The cleaning, servicing and repair of household durables or other goods, including vehicles used for household purposes;
- (c) The preparation and serving of meals;
- (d) The care, training and instruction of children;
- (e) The care of sick, infirm or old people;
- (f) The transportation of members of the household or their goods (United Nations, 2009, p. 98, para. 6.28).

A question that constantly arises is why services that are produced by household members and consumed within the same household are excluded from SNA. There are several reasons for this. One is that if the SNA production boundary were to include the production of domestic services generated by household members for their own use, there would be practically no unemployment, because the producers in question would be self-employed. Another reason is that it is not easy to impute a market value to these services as is done with the "production of goods" for own use. The System of National Accounts summarizes the reasons for their exclusion as follows:

- (a) The own-account production of services within households is a self-contained activity with limited repercussions on the rest of the economy. The decision to produce a household service entails a simultaneous decision to consume that service. This is not true for goods. [...]
- (b) As the vast majority of household services are not produced for the market, there are typically no suitable market prices that can be used to value such services. It is therefore extremely difficult to estimate values not only for the outputs of the services but also for the associated incomes and expenditures [...].
- (c) With the exception of the imputed rental of owner-occupied dwellings, the decision to produce services for own consumption is not influenced by and does not influence economic policy because the imputed values are not equivalent to monetary flows. Changes in the levels of household services produced do not affect the tax yield of the economy or the level of the exchange rate, to give two examples (United Nations, 2009, p. 98, para. 6.29).

It concludes the reasons by summarizing that

...the reluctance of national accountants to impute values for the outputs, incomes and expenditures associated with the production and consumption of services within households is explained by a combination of factors, namely the relative isolation and independence of these activities from markets, the extreme difficulty of making economically meaningful estimates of their values, and the adverse effects it would have on the usefulness of the accounts for policy purposes and the analysis of markets and market disequilibria. (p. 99) (United Nations, 2009, p. 99, para. 6.30).

Excluding unpaid services provided in households from the national accounts statistics, when these accounts are used to adopt measures and policies, harms those who perform the services in question and, therefore, results in an inaccurate image being presented of a country's economy (Ferrán, 2008). However, within the SNA framework, a satellite account can be constructed to describe the volume and monetary value of unpaid work performed by individuals in the production of services for their own use, so that comparisons can be made with the national accounts.

The unpaid household work satellite account is thus a basic alternative for estimating the economic value of domestic, care, community and volunteer work performed by household members without pay or remuneration, which is omitted from SNA because it is outside the production boundary.

Durán (2006) notes that the expanded national accounts do not break with the framework of the forms established in macroeconomic analyses, where activities that have a monetary value predominate, noting the importance of having a conceptual and statistical instrument that serves as a bridge between the two economies. Satellite accounts are a means to better understand "the economic dynamics within and among households, and between households and the rest of the economy, which is crucial for incorporating the care economy perspective into the analysis of the entire economic system" (ECLAC, 2017a, p. 194).

Linking the objectives of time-use surveys to the conceptual approach to be used is fundamental for preventing the activities proposed in the survey from grouping categories that span conceptual boundaries and subsequently hinder the construction of indicators that satisfy the purposes of the research.

C. Definitions of all forms of work

Traditionally, the concept of work only encompassed productive activities linked to the market. This led to the coining of the term "economically active population", thereby rendering the production of services in households invisible. This conception of work influenced the production of statistics which, in turn, helped to reinforce the idea that household production does not contribute to the economy.

Since the 1960s, however, this notion of work has been called into question and reconceptualized, with a view to including a set of activities that are performed in the home on an unpaid basis and contribute to social

reproduction and to the maintenance of the labour force, even though these activities are not directly linked to the market. This means breaking with the traditional conception of what is considered work and reimagining the conceptual frameworks of traditional economics. It also means developing specific measurement methodologies and instruments.

As Gómez Luna (2010, p. 21) notes, work is undoubtedly one of the most important factors in the formation of personal identity, in the construction of gender differences and in the establishment of social hierarchies. The study of work and its different forms is therefore fundamental in characterizing a society and marking its changes.

The eighteenth and nineteenth International Conference of Labour Statisticians recognized the productive activities of households as work. Resolution V on the measurement of working time was adopted at the eighteenth Conference, in which it was recommended that all work carried out in the countries be measured for the design of labour and work-life balance policies and that a technical manual be prepared to present best practices in the measurement of working time (ILO, n/da).

The nineteenth International Conference of Labour Statisticians resolution broadened the concept of work by defining it as comprising "(...) 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," regardless of the legality, formality or mediation of payment for the activity performed (ILO, 2013, p. 2).

One of the most important methodological and analytical advances made in recent years is the recognition of unpaid domestic activities as "work"; the definition of this concept proposed by the International Labour Organization (ILO) covers not only activities for own-use goods production, but also domestic services performed in households for social reproduction (ILO, 2013, pp. 2–3):

- (a) Work is defined irrespective of its formal or informal character or the legality of the activity.
- (b) Work excludes activities that do not involve producing goods or services (e.g. begging and stealing), self-care (e.g. personal grooming and hygiene) and activities that cannot be performed by another person on one's own behalf (e.g. sleeping, learning and activities for own recreation).
- (c) The concept of work is aligned with the General production boundary as defined in the System of National Accounts 2008 (2008 SNA) and its concept of economic unit that distinguishes between:
 - (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); and
 - (iii) households that produce goods or services for own final use.
- (d) Work can be performed in any kind of economic unit (ILO, 2013, p. 2).

As can be seen, in addition to the definition of "work" according to SNA, the concept is supported by several clarifications, such as the third-party criterion in order to distinguish "productive activities" from "non-productive" (personal) activities, and other clarifications that make it possible to single out activities that should not be considered as work.

Here it is worth noting that one of the objectives of the nineteenth International Conference of Labour Statisticians resolution is to "provide comprehensive measurement of participation in all forms of work in order to estimate volume of work or labour input for national production accounts, including existing "satellite" accounts, and the contribution of all forms of work to economic development, to household livelihoods and to the well-being of individuals and society" (ILO, 2013, p. 2).

In line with this objective, the nineteenth International Conference of Labour Statisticians states that:

Five mutually exclusive forms of work are identified for separate measurement. These forms of work are distinguished on the basis of the intended destination of the production (for own final use; or for use by others, i.e. other economic units) and the nature of the transaction (i.e. monetary or non-monetary transactions, and transfers), as follows:

- (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 this resolution) (ILO, 2013, p. 3).

"Other work activities" include "unpaid community service (p. 3). It also clarifies that the phrase "for own final use" is interpreted as production where the intended destination of the output is mainly for final use by the producer in the form of capital formation, or final consumption by household members, or by family members living in other households" (ILO, 2013, p. 5).

An essential aspect that should not be lost sight of is contained in recommendation 10 of the resolution issued by the nineteenth Conference, which is one of the most important points which integrate the definitions previously prepared by ILO and those of SNA:

Own-use production of goods, employment, unpaid trainee work, a part of volunteer work and "other work activities" form the basis for the preparation of national production accounts within the 2008 SNA production boundary. (ILO, 2013, p. 3).

These five forms of work are the basis for calculating GDP.

"Own-use provision of services and the remaining part of volunteer work complete the national production accounts i.e. beyond the 2008 SNA production boundary but inside the General production boundary" (ILO, 2013, p. 3).

According to the twentieth International Conference of Labour Statisticians, **paid work** comprises all work done for the production of goods or provision of services for others, in exchange for remuneration or profit. It includes self-employment, wage-earning work, auxiliary family work in market activities and the work of dependent contractors (ILO, n/db).

Unpaid work includes productive activities that are performed for one's own final use or for third parties, but without monetary recompense. It includes household production work, the provision of services for the household itself, for other households or for the community; it also includes unpaid work provided on a voluntary basis in non-profit institutions. Unpaid work therefore encompasses domestic and care work for the household itself or directed to other households, along with own-use work and volunteering (ECLAC/INEGI, 2016).

Unpaid domestic work includes a wide range of activities, including the following:

Domestic work done by household members for their own use or profit or that of their household without any monetary recompense. These are activities related to the concept of social reproduction, i.e., maintenance and reproduction of the workforce. The category excludes any activities carried out in households whose product is intended for sale in the market and for which remuneration is received, such as preparing food for sale, washing and ironing other people's clothes and making and mending clothing as a paid economic activity for the market, among other things. Travel times associated with the activities in this major division should be included in the time taken by the task itself, even if this is not specified. For example, the activities of cleaning, maintenance and minor repairs on vehicles used by the household include travel and waiting times. (p. 21) (ECLAC/INEGI, 2016, p. 23).

Unpaid care work regenerates and promotes people's physical and emotional well-being. It includes daily management and life-sustaining tasks, such as helping to carry out activities of daily living, such as feeding, dressing, personal hygiene, among others, as well as maintaining social relationships and providing psychological support to family members.

Care can be defined as everything we do to maintain and repair our world so that we can live in it as well as possible. That world includes body, being and environment, everything needed to weave a complex, life-sustaining web (Fisher and Tronto, 1990).

This means that care is a social function that involves both recipients and providers and should be understood as a set of rights (to provide care, to be cared for, not to provide care and to self-care). The care provider takes responsibility for the other person and makes different kinds of physical, mental, and emotional efforts. Fulfilling this responsibility creates an emotional bond between the caregiver and the care recipient (ECLAC, 2019b).

Unpaid care work has been conceptualized separately from domestic work because it forms part of a face-to-face relationship between two people and also implies a bond. Although all people require care throughout the life cycle, time-use measurements generally inquire about care in three population groups that display the highest demand for it: children, older adults and persons with disability or who are permanently dependent (Batthyány, Genta and Perrotta, 2015).

Own-use goods production work

This covers work done by household members to obtain mainly goods for own final use (personal consumption or capital formation). It includes all goods production activities, even if the decision as to whether to sell the goods or retain them for own final use is taken only once they have been produced (ECLAC/INEGI, 2016, p. 20).

Voluntary work

Encompasses support services provided to other households in the form of wholly unpaid domestic and personal care activities. It also encompasses the provision of services to individuals or the community by individuals or small groups of people who are not formally organized, as well as unpaid volunteer services provided to people through non-profit institutions. (ECLAC/INEGI, 2016, p. 24).

Commuting time is the time spent by people moving from and to different points of the territory where they carry on their daily activities outside the home. Mobility can assume different modes, including active ones such as walking, cycling, using public or private transport.

All of these forms of work are measurable. **Total work time**, also known as total workload, is an indicator used to quantify the time devoted to all productive activities, that is, to work in its broadest sense. It is calculated as the sum of total hours spent on unpaid work, plus total hours dedicated to paid work of the entire population considered. It makes it possible to quantify the total work necessary to satisfy a population's welfare needs, while at the same time making visible the contribution of social groups such as women, which are rendered invisible in traditional statistics (ECLAC, n/da).

D. Other basic definitions

In individuals' lives, all time is spent doing "something"; the different ways in which people use their time are referred to as "activities". One of the objectives of time-use surveys, therefore, is to see how people "use their time", and how they distribute it across "daily activities" throughout a day or a set period of time (usually a week).

A dictionary definition of activity is a set of operations or tasks pertaining to a person or entity (RAE, 2021). In the case of time-use surveys, "activity" is the basis on which time is measured; so there is a need to define this term and distinguish between activities that are productive and those that are not.

The proposed definitions are as follows:

Activity: set of functions or tasks performed by people to satisfy some personal, household or societal need. The use of time and the activities that people perform during defined periods are circumscribed by multiple social, economic and cultural factors, and also by the legal and institutional framework of each country (ECLAC/INEGI, 2016).

Productive activities: those that refer to participation in the production of goods and services that are mainly commercialized in the market and are intended to meet the needs of the population, and in the production of services for the purposes of social reproduction, as well as in the production of services for the purposes of social reproduction, so that the amount of time spent on each of these activities can be quantified (ECLAC/INEGI, 2016).

Non-productive or personal activities: activities that are not productive in an economic sense and are performed by a person for his or her own benefit and cannot be delegated to another person. The activity itself

and its consequences do not involve anyone else and only affect the person concerned. Basic human activities such as eating, drinking, sleeping, exercising and others are included (ECLAC/INEGI, 2016).

Other concepts also need to be defined. Some situations in everyday life involve simultaneous activities, in which one activity is carried out at the same time as another. Examples include taking care of children while cooking; knitting while watching television; exercising while reading the news, among others. This makes it necessary to define the "main or primary" activity and a "secondary activity" that is performed simultaneously. The following definitions are proposed:

Simultaneous activities: two or more activities engaged in by a person over an interval of time or at the same time (primary and secondary activity) (United Nations, 2020).

Main or primary activity: the activity whose added value exceeds that of any other activity performed within the same interval of time. In other words, it is the activity that the respondent determines as main activity, within a given time unit, because it has the highest value in terms of concentration, interest, etc. or meaning for him/her, compared to other possible activities within the same time unit (United Nations, 2020).

Secondary activity: an activity carried out at the same time as another activity (primary activity), and is considered of less importance by the respondent. In other words, it is the activity whose value added does not exceed that of another activity (primary activity) carried out within the same time unit or simultaneously (United Nations, 2020).

Although it adds to the respondent's burden, the collection of information on secondary activities enhances the accuracy of the data. The collection of secondary activities allows to identify specific types of activities that otherwise may not appear or would typically be underestimated if only primary activities are covered. Childcare is a classic example of an activity performed in parallel with others, like domestic work, that respondents tend to report as secondary activity only (United Nations, 2020).

E. Classification of time-use activities

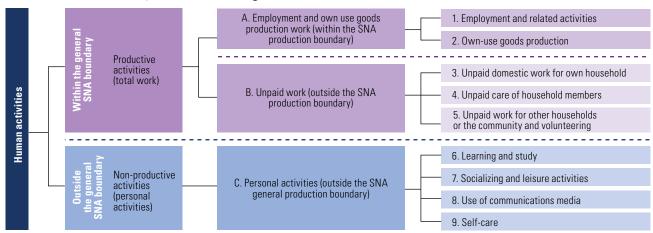
Classifications makes it possible to group data systematically and homogeneously to facilitate the analysis, interpretation and comparison of information. The statistical classification provides "a set of discrete values which can be assigned to specific variables which are to be measured in a statistical survey... which will be used as basis for the production of statistics" (Hoffman, 1997, cited in United Nations, 2004, p. 17).

In 1995, the Beijing Platform for Action called for the preparation of a classification of time-use activities. In 1997, the first version of the International Classification of Activities for Time-Use Statistics (ICATUS) was presented, which aimed to provide a framework with standardized concepts and definitions, so that internationally comparable time-use statistics can be produced. The most resent revision was made in 2016, with the aim of simplifying the structure of the classification and adapting the classifier to ILO resolutions on work, employment and the underutilization of the labour force (Shibata, 2016). It is a hierarchical classification of all activities in which the general population can spend their time during the 24 hours of a day. Its basic design assumes that data is collected through an activity diary.

The Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) was created to provide a gender-sensitive instrument that is appropriate for the specific characteristics of the region, considering that most time-use measurements in the region have collected data through a questionnaire based on a list of activities.

CAUTAL is a classifier developed by the Working Group on Gender Statistics of the Statistical Conference of the Americas. The first version, dating from 2009, underwent several revisions until 2015 when it was adopted by the Conference as a classifier of time-use activities with a gender perspective, and adapted to the characteristics of the region. This classifier "is a dynamic, flexible instrument designed to respond to the classification requirements and socioeconomic characteristics of each country." Its conceptual framework is aligned with the SNA production boundary and encompasses the activities carried out for the production and well-being of household members, incorporating a gender perspective. The general structure of CAUTAL is shown in diagram III.1.

Diagram III.1
CAUTAL structure and major divisions (one digit)



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Although the regional and global classifiers had very different structures and conceptual frameworks at the outset, both are now conceptually based on SNA 2008 and on the extended definition of work adopted in the resolution of the nineteenth International Conference of Labour Statisticians. In most categories, both classifiers allow a level of comparability at the two-digit level, except for employment, which only affords comparability at one digit or requires the combination of contextual variables to move from one classification to another. Table III.1 displays the mutually exclusive categories.

Table III.1
Relationship between CAUTAL, ICATUS, SNA and work forms

Intended destination of production	For own final use			For use by others							
Forms of work	Own use production work		Employment (work for pay or profit)		Unpaid	Other work	Volunteer work				
	Of services		Of goods			trainee work	activities	In market and non- market units	In house producin		
CAUTAL	4. Unpaid care of household members work for own household 51. Unpaid work for other households 2. Own-use goods production		1. Employment and related activities		12. Unpaid trainee work	10. Other productive activities	5. Unpaid work for other households or the community and volunteering				
				11. Employment	13. Employment- seeking or setting up a business	14. Commuting to and from work			53. Volunteer work at non-profit institutions	52. Unpa for the c	aid work ommunity
ICATUS 2016	4. Unpaid	4. Unpaid 3. Unpaid 2. Producti		Employment and related activities			5. Unpaid volunteer, trainee and other unpaid work				·k
	services for services f	for services for for own		11. Employment in		Employment	53. Unpaid trainee	59. Other unpaid	51. Unpaid direct volunteering for other households		teering
	household household family and family members members		final use	corporations, government and non-profit institutions in household enterprises to produce goods		in households and household enterprises to provide services	work and related activities	work activities	52. Unpaid co organization-	ommunity- based volu	and unteering
Form of work	Unpaid work			Paid work			Unpaid work				
Relation to	Activities within the SNA production boundary										
2008 SNA	Activities inside the SNA General production boundary										

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of International Classification of Activities for Time-Use Statistics, Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL), International Labour Organization (ILO), Resolution concerning Statistics of Work, Employment and Labour Underutilization, Geneva, 2013, and System of National Accounts (SNA).

Lastly, the classifier also encompasses personal or non-productive activities, in other words those that people do for their own benefit that cannot be delegated to someone else. These include basic human activities such as sleeping, eating, drinking, dressing, among others; as well as activities related to learning and studying, socializing, attending cultural, entertainment and sporting events, hobbies and pastimes, sports and the use of communications media.

Annex III.A1

Glossary

Activity: set of functions or tasks performed by people to satisfy some personal, household or societal need. Time use and the activities people carry out during specified periods are shaped by numerous factors of a social, economic and cultural nature, and by the legal and institutional framework in each country (ECLAC/INEGI, 2016).

Activities list: set of activities to be studied through the statistical operation with which a structured questionnaire will be generated with previously established questions. Generally, the questions are asked in two phases: firstly, whether or not the activity was carried out; and secondly, the time spent on it.

Activity classifier: system that categorizes different activities into groups to provide a picture of how people spend their time, and identify how much time is spent on different activities to support policymaking, and facilitate the collection and organization of statistics. It defines the framework for assigning activities to numeric activity codes and provides a basis for defining analytical categories of activities. It is usually hierarchical in nature with each successive tier made of more detailed codes (United Nations, 2020).

Average time: calculated by dividing the number of hours spent on an activity or group of activities by the number of people who participated in the activities.

Care: everything that is done to maintain, and repair our world so that we can live in it as well as possible. That world includes body, being, and our environment, everything needed to weave a complex, life-sustaining web (Fisher and Tronto, 1990). This means that care is a social function that involves both recipients and providers and should be understood as a set of rights (to provide care, to be cared for, not to provide care and to self-care). The care provider takes responsibility for the other person and makes different kinds of physical, mental, and emotional efforts. Fulfilling this responsibility creates an emotional bond between the caregiver and the care recipient (ECLAC, 2019b).

Commuting time is the time people spend moving from and to the different points of the territory where they carry out their daily activities outside the home. Mobility can assume different modes (including active modes such as walking or cycling) and either public or private transport.

Data collection instrument: an instrument used to compile information on the activities that people engage in and the time allocated to them. There are two main instruments used to collect data on time use: the activity diary, which can be a full diary or a light diary; and the questionnaire of predefined questions about a list of time-use activities.

Data collection mechanism: the type of device used to collect the information, which may be a paper form or the electronic equivalent. Mechanisms can be combined (mixed mode) depending on the study objectives. There are several dimensions that differentiate modes, such as the presence of interviewer, how questions are recorded, the technology used, etc. (United Nations, 2020).

Data reference period: the period over which the activities being surveyed are measured; for example, a week or a day. When the reference period is a day, the survey may ask about the previous day, a working day and a non-working day, or a weekday and a weekend day. In general, an attempt is made to reconstruct the hours spent on unpaid work per week, in order to compare with the hours spent in paid work, and thus estimate total work.

Diary: an instrument that collects information on all activities undertaken by respondents over a given period of time. There are two basic types of diary: full diaries and light diaries. A 24-hour diary can be used, which records the time at which the activity is performed over a full day; or a simplified version, which usually only records the duration of the activity during a specific period of time, which does not necessarily coincide with a 24-hour day.

Household: a group of individuals who: (a) live in the same dwelling; (b) have at least one meal together each day; and (c) pool income and other resources for the purchase of goods and services. Some household surveys modify this definition according to local circumstances (United Nations, 2020).

Household production: production activities performed by household members outside the market or for own final use. Such activities may be replaced by market goods or paid services if circumstances such as income, market conditions, or personal preferences permit the service to be delegated to someone else outside the household (Reid, 1934).

Income: all receipts whether monetary or in kind (goods and services) that are received by the household or by individual members of the household at annual or more frequent intervals, but excluding windfall gains and other such irregular and typically one-time receipts (ECLAC, 2019c).

Main or primary activity: the activity whose value added exceeds that of any other activity carried out within the same time interval. In other words, it is the activity that the respondent determines as main activity, within a given time unit, because it has the highest value in terms of concentration, interest, etc. or meaning for him/her, compared to other possible activities within the same time unit. (United Nations, 2020).

Measurement objectives: the objectives (general and specific) should be aligned with the conceptual framework, and should at least provide information on the distribution and use of time by women and men, to measure the different forms of work. This can then be used to design, formulate monitor and evaluating public policies that contribute towards achieving equality. They should also include the measurement of total work, provide inputs for the unpaid work satellite account, and measure the time spent caring for children, the elderly, and persons with disability, among others.

Mode of data collection: the manner in which the data is collected: face-to-face, telephone or online. The modes can also be combined with different mechanisms: personal interview assisted by mobile device, face-to-face interview with a paper form, computer-assisted telephone interview, computer-assisted web interview.

National accounts are a statistical information system based on accounting and economic principles, in which a country's economic activities are recorded in monetary terms. Based on this information, indicators are calculated to monitor the behaviour of the economy (for example, economic growth, the unemployment rate and other labour market indicators, as well as the rate of inflation or deflation, among other economic imbalances) (United Nations, 2009).

National statistical system: refers to producers of statistics within a country and is composed of the national statistical office, which is the main authority of the system; other official producers of statistics, which are the organizational entities of the national authorities, as well as the central bank, which produce and disseminate official statistics. The national statistical system defines the strategic development of the country's official statistics to meet existing and emerging user needs, and, consequently, decides on the products to be delivered and the measures needed for their development, taking into account the necessary resources (ECLAC, 2020b).

Own-use work: "covers work done by household members to obtain mainly goods for own final use (personal consumption or capital formation). It includes all goods production activities, even if the decision as to whether to sell the goods or retain them for own final use is taken only once they have been produced" (ECLAC/INEGI, 2016, p. 22).

Paid work: comprises all work for the production of goods or provision of services performed for others, in exchange for pay or profit. It includes self-employment, wage-earning employment, contributing family worker in market activities and the work of dependent contractors (ILO, n/db).

Passive care: refers to the time a person is in close proximity and available to provide active care to another person, should the need arise.¹

Personal or non-productive activities: activities that are not productive in an economic sense and that people carry out for their own benefit and cannot be delegated to another person. The activity itself and its consequences do not involve anyone else and only affect the person concerned. The category also includes basic human activities such as eating, drinking, sleeping, exercising and others (ECLAC/INEGI, 2016).

Definition based on the discussions of the Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics of the United Nations.

Preparatory activities for conducting a survey: this refers to the activities that need to be carried out prior to taking the measurement, such as: definition of the conceptual framework and the objectives of the measurement; exchange of information and consultation with gender experts from the specialized academic community, as well as with public policy actors; design of the data collection instruments, the training of all technical personnel (which should include gender issues) and the testing of the instrument. It also includes the tasks of raising awareness among the target population, such as the delivery of information pamphlets, or visits to apprise the selected households of the reasons for the measurements and their importance.

Production is understood as a physical process, carried out under the responsibility, control and management of an institutional unit, in which labour and assets are used to transform inputs of goods and services into outputs of other goods and services. "All goods and services produced as outputs must be such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge" (United Nations, 2009, p. 6, paragraph 1.40).

Production boundary: all production effectively destined for the market, whether for sale or for barter, all goods and services provided free of charge to individual households or collectively to the community by public administration units or non-profit institutions that serve households, all goods produced for own use, own-account production of housing services, and services produced through the employment of paid domestic staff (United Nations, 2009).

Productive activities: those that refer to participation in the production of goods and services that are mainly commercialized in the market and are intended to meet the needs of the population, and in the production of services for the purposes of social reproduction, as well as in the production of services for the purposes of social reproduction, so that the amount of time spent on each of these activities can be quantified (ECLAC/INEGI, 2016).

Satellite account: accounts that expand the analytical capacity of national accounting for selected areas of social concern in a flexible manner, without overburdening or disrupting the central system (United Nations, 1993).

Secondary activity: the activity that is carried out at the same time as another activity (primary activity), and is the activity whose value added does not exceed that of another activity (primary activity) carried out within the same time unit or simultaneously (United Nations, 2020).

Simultaneous activities: two or more parallel activities engaged in by a person over an interval of time or at the same time (primary and secondary activity) (United Nations, 2020).

Social time: calculated by dividing the number of hours dedicated to an activity or group of activities by the number of people in the target population, regardless of whether they actually participated in the activities in question.

Target population: the group of people for whom the time spent on different activities is being studied. It generally refers to a population with specific characteristics, such as being above a minimum age. In some cases, the target population includes geographic (rural/urban), ethnic and racial dimensions, among others, which are relevant depending on the country.

Total 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, 2013, p. 2).

Total work time, also known as total workload, is an indicator used to quantify the time spent on all productive activities; in other words, work in its broadest concept. It is calculated as the sum of the total hours spent on unpaid work, plus the total hours spent in paid work by the entire population considered. It makes it possible to quantify the total work needed to meet the welfare needs of a population, while at the same time making visible the contribution of social groups such as women, which are hidden in traditional statistics (ECLAC, n/d).

Type of information survey: format in which the information on household time-use will be collected, which can be of two types:

- (i) A module or section included in a household survey, such as employment or multipurpose. The attached module generally has specific implementation procedures. The section, in turn, is fully integrated into a household survey on a related topic (United Nations, 2020).
- (ii) A stand-alone or specialized survey.

Type of respondent: refers to the person who answers the survey or module. He or she may be either a direct respondent or a proxy respondent. When the measurement is applied to a direct respondent, each member of the household reports his or her participation and time spent in the different activities surveyed. In contrast, when it is applied to a proxy respondent, one household member is responsible for the participation and time commitment of all the other members. The proxy respondent is selected within the household because he/she fulfils certain characteristics such as being responsible for household chores, and, therefore, is someone who knows the dynamics of work and care in the household.

Unpaid care work: regenerates and promotes people's physical and emotional well-being. It includes daily management and life-sustaining tasks, such as helping to carry out activities of daily living, such as feeding, dressing, personal hygiene, as well as maintaining social relationships or providing psychological support to family members.

Unpaid domestic work: includes a wide range of activities "done by household members for their own use or profit or that of their household without any monetary recompense. These are activities related to the concept of social reproduction, i.e., maintenance and reproduction of the workforce. The category excludes any activities carried out in households whose product is intended for sale in the market and for which remuneration is received, such as preparing food for sale, washing and ironing other people's clothes and making and mending clothing as a paid economic activity for the market, among other things. Travel times associated with the activities in this major division should be included in the time taken by the task itself, even if this is not specified. For example, the activities of cleaning, maintenance and minor repairs on vehicles used by the household include travel and waiting times" (ECLAC/INEGI, 2016, p. 21).

Unpaid work: includes productive activities that are performed for one's own final use or for other people, but without remuneration. It includes household production work, provision of services for the household's members, for other households or for the community; it also includes unpaid work provided on a voluntary basis in non-profit institutions. Unpaid work therefore encompasses domestic and care work for the same or other households, own-use work and volunteering (ECLAC/INEGI, 2016).

Voluntary work: work that is intended for "support services provided to other households in the form of wholly unpaid domestic and personal care activities. It also encompasses the provision of services to individuals or the community by individuals or small groups of people who are not formally organized, as well as unpaid volunteer services provided to people through non-profit institutions" (ECLAC/INEGI, 2016, p. 24).

Chapter IV

Methodological aspects of time-use surveys

In collecting time-use data, national statistical offices (NSOs) face specific methodological choices in each of the statistical production process phases defined in the Generic Statistical Business Process Model (GSBPM). In all of them there are specific considerations that have to be taken into account to measure time use correctly (see diagram IV.1) and thus guarantee the minimum information needed to support public policy. Although the eight phases of the statistical process follow an organized structure, they are not necessarily undertaken linearly, since it is possible to perform some activities simultaneously, omit them or return to them (DANE, 2020, p. 10).

Diagram IV.1
Phases of the time-use measurement process

Specify needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
- Consultation with potential users of the information - Definition of what is to be measured - Definition of objectives - Identification of available information and new information needs - Securing of resources for the entire statistical process	- Definition of conceptual framework aligned with the established objective - Design of each of the subsequent phases - Methodological decision making for the operation: type of data collection, collection mechanism, mode of collection, collection instrument, reference period, target population, among others	Preparation of the questionnaire and tests Programming of specific software Construction of staff training tools	Staff selection and training Contingency response protocols and considerations for data collection in times of crisis Operational evaluation and follow-up mechanisms	Coding of variables Data validation Data imputation Data purging	Construction of main indicators Cross-referencing of relevant variables Preparation and review of results for dissemination	- Development and publication of dissemination products - Use of different dissemination media - Creation of products differentiated according to the target audience, e.g. infographics with basic indicators, technical and specialized documents - Availability of microdata	Final evaluation report on the statistical operation Identification of lessons learned Identification of improvement opportunities for a next operation

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

This chapter presents the different axes of methodological decisions for time-use measurement, which are present both in the literature on the subject and in the experience of the countries —to make them useful for informing and guiding the methodological decisions that each country must make in its particular context. The aim is, therefore, to provide countries with inputs that enable them to choose the most appropriate methodology, according to their own needs, realities, limitations and possibilities, considering the advantages and disadvantages of each one and ensuring the comparability of the indicators obtained from these processes. These decisions should make it possible to balance the objectives of the survey with the effective resources needed to implement it, while guaranteeing the quality of the information obtained.

The chapter also describes some of the countries experiences in the application of time-use measurement.¹

¹ Chapter II provides a more thorough systemization and characterization of these measurements in the region, and of the methodological choices made by the countries and their evolution over time

A. Specification of information needs and definition of objectives

As in any statistical process, it is essential to define and analyse the information needs in the planning stage of time-use data collection. To this end, the main or potential users of the information must be involved in order to answer the following questions, among others: What is to be measured? Why is it to be measured? How is it to be measured? When should it be measured? What uses will be made of the information?

At this stage, it is important to consult those responsible for the design, implementation and monitoring of public policies, as well as experts in the analysis of time use and gender issues, the academic community and civil society, among others. This will ensure that the operation meets national, regional and international information needs; and, above all, that it is useful for highlighting this important dimension of human activities. The results of the measurement must also serve as an input for the implementation of public policies and measures aimed at promoting a fairer distribution of time and closing gender gaps.² For this to happen, it is essential that the institutions which will be users of the information provided by the survey participate as from this initial stage (see box IV.1).

Box IV.1

Main users of time-use data

In Latin America and the Caribbean, the main users and promoters of time-use data collection have been the machineries for the advancement of women. The alliance between the national machineries and NSOs has made it possible to mainstream gender in the region s time-use measurements. It has also promoted the inclusion and in-depth analysis of care issues, which is a specific feature that should be highlighted relative to other regions. This alliance has been strengthened thanks to the creation in the region of mechanisms related to statistical production that involve the institutional framework of the national machineries for the advancement of women.

Other actors that have also played a key role in determining the objectives and conceptual frameworks of time-use surveys in the region have been: central banks and ministries of labour, social development, health and planning, among others.

Source:R. Aguirre and F. Ferrari, "Surveys on time use and unpaid work in Latin America and the Caribbean: Experience to date and challenges for the future", Gender Affairs series, No. 122 (LC/L.3678), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2013, and Economic Commission for Latin America and the Caribbean (ECLAC), Social Panorama of Latin America, 2016 (LC/PUB.2017/12-P), Santiago, 2017.

^a See [online] https://www.cepal.org/es/directorio-de-mecanismos-para-el-adelanto-de-la-mujer.

The inclusion of the information needs detected in the consultations with the different stakeholders mentioned above has an impact on the objectives and design of the statistical operation. This, in turn, will be subject to the evaluation of budgets, the length of the form and the feasibility of the operation, among other aspects.

The need for time-use data may respond to a specific demand, new legal mandates or international commitments; or else it may arise from evaluations made of previous statistical processes. Thus, the specific time-use problems to be measured, the origin of the information needs and the specifications demanded must be clearly defined to ensure that the statistical operation actually satisfies these requirements.

This phase should investigate whether there are other surveys or modules that adequately and exhaustively capture time-use activities, in order to consider the relevance of asking certain questions and avoid duplicating data collection, which increases NSO information production costs.

Based on the information needs identified, the objectives of the statistical operation will be established. In Latin America and the Caribbean these have been mainly linked to obtaining information on how women and men distribute their time between the different forms of work (both paid and unpaid) and personal activities. In addition, the statistical operation can respond to specific objectives related to providing inputs for the preparation of satellite accounts of unpaid work; providing information for the design, formulation, follow-up and evaluation of public policies; and making it possible to measure time poverty, among others.

Chapter VI contains an extensive discussion on the potential of time-use data in public policymaking.

The identification of information needs and the establishment of the objectives of the operation and its potential benefits should be recorded in the respective technical and methodological documents. In addition, the financial needs for execution of the operation should be established and the scope of the operation determined. The first time-use measurements in the region were financed mainly by international organizations. At present, however, national governments, mainly the NSOs and the national machineries for the advancement of women, have provided their own financing, which puts the continuity and institutionalization of these operations on a firmer footing.

The difficulty of allocating economic resources for the implementation of time-use measurements is an obstacle that affects the periodicity of this type of study. Financial constraints also have implications for the type of data collection, since stand-alone surveys are more expensive than a module that is attached, or complementary, to the measurements already planned in household surveys (Aguirre and Ferrari, 2013). In this sense, the national machineries for the advancement of women play a very important role in terms of the periodicity of the surveys, especially to establish the need for information and to obtain the necessary funding.

The greatest possible stimulus for generating information is that it is used (Pedrero, 2005) so the wide-ranging and exhaustive use made of the information provided by the time-use surveys has an impact on ensuring that they are applied periodically (Marco Navarro, 2012). Accordingly, it is essential to strengthen inter-agency links between statistical offices and the national machineries. In the region, the renewed support received from international cooperation and the United Nations system in promoting this link has proven to be a good practice (Marco Navarro, 2012).

Time-use measurements need to be institutionalized in the NSOs, to become part of each country s national statistical system and thus guarantee periodicity and a budget appropriation. This is the only way to ensure the continuity and comparability of time-use indicators among the countries of the region.

In general, the issues to be considered when specifying information needs and their financing include the following:

- Are there legal mandates that require time-use data to be compiled?
- Has the country complied with regional or international regulations requiring the collection of time-use data?
- Are there previous experiences in time-use data collection?
- Who are the main users of the information?
- Are there processes for consultation with users?
- What are the objectives of the survey?
- What concepts are important for time-use measurement?
- What are the sources of funding for this statistical process?
- Is there a budget for periodic measurement assigned in the national statistical office?
- Is it possible to achieve the objectives with the resources available?

1. Objectives of the surveys

The survey should respond to the needs defined by the different actors involved in its preparation. The objectives of time-use measurements in the region include the following: to measure the different forms of work; to provide inputs for the design, formulation, follow-up and evaluation of public policies on co-responsibility for care work; to have evidence for the design of comprehensive care systems and to contribute to the production of the satellite account for unpaid household work, among others.

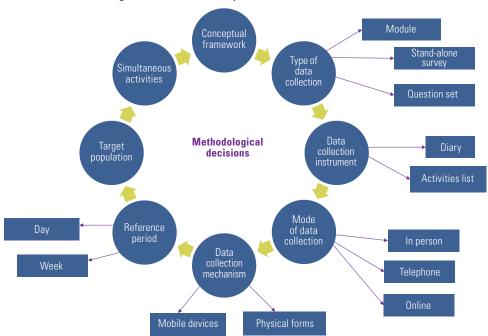
The methodological aspects of the measurement can be defined according to the objectives set. If, for example, one of the objectives is to make an economic valuation of unpaid work, then unpaid activities will need

to be considered in detail in the questionnaire. If the aim is to develop policies on care services, a questionnaire is needed that can collect detailed information on the care needs of household members, as well as the different family arrangements for providing it.

B. Design of the time-use survey

This phase defines how the time-use data will be collected, with a view to achieving the established objective: for example, definition of the conceptual framework, design of the questionnaire, specification of the sampling frame, design of indicators and definition of the dissemination strategy and outputs, among others. Considering the wide range of subprocesses contained in this phase, the main options to be considered when designing an operation for the collection of time-use data are described below (see diagram IV.2).

Diagram IV.2
Methodological decisions in the design of time-use surveys



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Link between the conceptual framework and the measurement objective

How the conceptual framework of time-use surveys is defined influences the information obtained, because it delineates the activities from which the data are collected, and must therefore be aligned with the measurement objectives (see box IV.2). According to the conceptual framework developed in chapter III of this guide, if, for example, a conceptual approach focused on measuring forms of work is used, personal activities will probably not be taken into account. In contrast, in the production boundary approach, the inclusion of personal activities makes it possible to distinguish between productive and non-productive activities.

The decision on the conceptual approach to be prioritized will depend on the country's interest, based on its priority public policies, and also on the resources available.

It is therefore important to explicitly define the conceptual approach used, which is linked to the objectives of the measurement. Each approach offers limitations and possibilities, and affects the use made of the results.

Box IV.2

Conceptual approach to time-use measurement in Uruguay

The time-use measurement conducted in Uruguay in 2013 was developed in the framework of a comprehensive systemic care policy (National Care System). Accordingly, for the measurement, the conceptual approach based on measuring the different types of work was adopted, and the time spent on care work in different dependent population groups was investigated in further detail. This meant lengthening the form, with concomitant costs.

Source: Ministry of Social Development, Cuidados como Sistema. Propuesta para un modelo solidario y corresponsable de cuidados en Uruguay, Montevideo, 2014.

2. Type of data collection: module or stand-alone survey

There are two possible strategies for collecting household time-use data:

- (i) A module or section that is included in a household survey, such as employment or multipurpose surveys. The attached module generally has specific implementation procedures, while the section is fully integrated into a household survey on a related topic (United Nations, 2020).³
- (ii) A stand-alone or dedicated survey conducted exclusively to measure participation and time spent on work (paid and unpaid) and personal activities (educational, recreational and cultural, among others).

The decision to measure time use through a specific and stand-alone survey or through a module is one of the most crucial, not only because of its consequences in terms of the potential of the information, but also because of the logistical and financial commitments involved. Each of these survey types has advantages and disadvantages, so national statistical offices must decide which is best suited to the country s specific reality, needs and priorities. However, whenever possible, the implementation of stand-alone surveys is recommended because of the wealth and depth of information they can capture. The two measurement methods are not mutually exclusive, however, since the inclusion of a module in recurrent operations can be used to complement information on time use obtained through the survey (see box IV.3).

Box IV.3

Information on time use in Colombia

In Colombia, time-use data are produced officially through the National Time-Use Survey (ENUT), which is legally required to be conducted every three years. However, the Large-Scale Integrated Household Survey (GEIH), which is published monthly, contains a small set of questions that afford a general estimate of the allocation of people s time to paid work, unpaid work and other activities. Thus, GEIH makes it possible to constantly obtain a general approximation of time use which is shown to be consistent with ENUT, according to the study conducted between the National Administrative Department of Statistics – (DANE) of Colombia and the academic community.

Source: A. M. Tribín-Uribe and others, How are the statistics obtained from the GEIH and the ENUT similar and how do they differ? Un análisis comparativo y descriptivo acerca del mercado laboral y el trabajo no remunerado, Bogotá, 2021.

(a) Module in an existing survey

One of the main advantages of including a time-use module in an existing survey is that it costs less than a stand-alone survey, because it shares the sampling design and field operation with the host survey. It is therefore a key alternative in countries where the periodicity of the measurements depends on financial resources being available.

³ Some countries in the region have included a question set. However, this format captures information on a very small number of activities, which does not allow for an appropriate and detailed survey of which activities people perform and for how long. In some cases, the questions are included as a control for a more extensive measurement.

Thus, if a module is used to measure time use, it should be included in a continuous survey to take advantage of the qualities of this type of survey, without having to undertake the extra activities of designing a new statistical operation. These qualities include: having national coverage and the possibility of making estimates at the geographic level, which the continuous survey sample allows; analysis of time use integrated with other sociodemographic or contextual variables contained in the operation, in addition to the fact that the sample size allows for additional disaggregation possibilities; and constant data collection throughout the year, avoiding the problems of seasonality that generally affect stand-alone surveys conducted during a certain period of the year, provided the module is applied on a permanent basis.

However, collecting time-use data by adding a module to an existing survey has its limitations. Firstly, it imposes a constraint on the capture of broad-ranging and sufficient information that facilitates deeper understanding of the mechanisms that generate gender inequalities. In addition, extensive and exhaustive modules can reduce the response rate and/or completeness of the original survey forms by causing respondent fatigue. This can complicate the measurement of time use with a high level of disaggregation and generate measurement errors and thus undermine the validity and reliability of the data. It is therefore necessary to prioritize and select the activities and the level of detail of the information captured through the module, for which the minimum list of harmonized activities for measuring time use, proposed in chapter V, may be useful.

Choosing the survey in which the module will be included is also very important. Care must be taken to ensure that its methodological characteristics allow for adequate collection of time-use data. For example, the type of respondent is a fundamental issue, because, in time-use measurements, it is not ideal that one person alone responds for the entire household. Preferably, each person surveyed should report the time they personally spend on certain activities (see section IV.B.7). This is because one person may not know the time spent by the other household members, and this could lead to erroneous estimates of the time spent on each activity. It is therefore necessary to adapt the methodology for measurement of the module based on the specific requirements of time-use measurements.

Including a module in an existing survey also imposes constraints on sample design, since this is done according to the objectives and variables of the survey and, therefore, does not necessarily satisfy the information needs of time-use measurement. In other words, with the existing sample design, the survey may not elicit representative time use for some activities, especially those that are performed less frequently.

The collection of time-use data requires the field operation to have particular characteristics, depending on the reference period. Examples include keeping the sample distributed equally among all days of the week, or collecting data at a time close to the period that the respondent is asked to recall. Including a time-use module may increase the complexity of the field operation in surveys that would not normally require these conditions. Moreover, household surveys already tend to be lengthy, so adding a module to them implies greater respondent fatigue. Moreover, if the module is the last section of the survey, it could generate respondent disinterest and undermine the quality of the data obtained.

If it is decided to add a time-use module to an existing survey, it is of the utmost importance that the training and education processes sensitize personnel on gender, unpaid work and time use, among other issues. Otherwise, the interviewers will not understand the importance, content and thorough processing of the module, and they will be unable to transmit this information adequately to the source, thereby detracting from the quality of the data collected.

(b) Stand-alone or dedicated survey

Data collection through a stand-alone survey designed exclusively to measure the use and distribution of time will make it possible to design the entire statistical operation based on the objective of collecting data on time use and unpaid work; obtain a variety of detailed and disaggregated indicators with specific information by activity; mainstream gender throughout the operation and include the necessary concepts in staff training and education processes; capture detailed information on activities that are partially measured in other instruments, for example, own-use activities, or activities with particular importance for public policies, such as care for persons with disabilities. It also avoids respondent fatigue, since stand-alone surveys can be shorter than other household surveys.

The design of a statistical operation with the sole purpose of collecting data on time use will also facilitate the application of international standards in this area, as well as the use of classifiers.

However, a stand-alone survey entails a higher data collection cost; so, if it is not included in institutional budgets, it will be more difficult to maintain its frequency and will require additional management and statistical processing in NSO agendas.

3. Collection instrument: diary or activities list

The data collection instrument used in time-use surveys or modules aims to gather information on the activities people engage in, and the time they spend on each of them. Two instruments are mainly used to collect time-use data: the activity diary, which can be a full or light diary; and the predefined questionnaire on a list of time-use activities.

(a) Time-use diary

The time-use diary is an instrument that records, in chronological order, the activities performed by a person during a specific reference period, as well as their complete sequence. That is, each activity is recorded with its start and end time. The activities are generally recorded from the moment the person wakes up during a 24-hour period, in pre-established intervals, either in minutes (10, 15 or 30 minutes) or in hours. In these diaries, the respondent keeps a record of the activities as they occur, either on paper or on an electronic device. This procedure requires the respondent to follow the instructions on how to proceed (Seymour, Malapit and Quisumbing, 2020).

Diaries thus provide information on the duration, timing, sequence and frequency of activities during a given period. Compared to questionnaires based on an activities list, diaries capture the time spent on each activity more accurately, since they do not rely on recall or the subjectivity of the respondent because the activity is recorded as it is performed (Carrasco, 2016), and they control the total number of hours per day more effectively.

In general, two basic types of diaries are considered: full or extended diaries and light or simplified diaries. A full diary allows respondents to record their activities in greater detail. If the diary is open-ended, the respondents provide information by describing the activities in which they participated in their own words, without adhering to a pre-established list. If a predefined activities list is used, it may be more extensive than that used in simplified or light diaries. Extended or full diaries make it possible to record secondary or simultaneous activities along with contextual information —for example, the place and interaction with other people when performing such activities (in response to the questions "where?" and "with whom?").

To reduce the respondent burden and cost and information processing time, a light diary can be employed. This will provide less detail in terms of activities and/or contextual information, but should achieve higher response rates and reduced costs and time (United Nations, 2020). This format uses a predefined list with a limited number of activities and less detailed categories.

When using time-use diaries, decisions must be made on several specific methodological issues, such as the mode of data collection, the number of days spanned in the diary, the days of the week to be covered and their relative distribution, whether to use an open interval or a fixed interval during which to record the activities, the number of activities to be recorded, and the contextual variables to include in the description of the activity (United Nations, 2006).

Employing time-use diaries has a number of advantages, including the following:

• Full diaries make it possible to address the problem of simultaneous activities, since they account for both main and secondary activities by making it possible to record more than one activity for the same time of the day. This advantage is relevant because the importance of capturing multiple activities is recognized, especially given the simultaneity of performing domestic chores and caring for dependents (Aguirre and Ferrari, 2014a, p. 34).

- The use of full diaries makes it possible to visualize the timing of activities and describe how people
 organize their daily responsibilities in terms of domestic work, care and paid work throughout the day
 (Aguirre and Ferrari, 2014a, p. 36) (Aguirre and Ferrari, 2013).
- Light diaries ease the burden on respondents, because they require less time to complete and do not require a high degree of literacy.
- Light diaries reduce the cost of data collection and processing.
- When based on a pre-coded activities list, the problem of categorizing activities is reduced.

However, time-use diaries also have the following disadvantages:

- They represent a barrier for population segments with low levels of literacy or with little habit or different
 ways of measuring time.⁴ Difficulties in understanding a self-administered diary could put the reliability
 and quality of the data obtained at risk, especially in the case of detailed diaries.
 - In countries with populations with low literacy levels, the interpretation of the diary and the recording of activities in time intervals can be an obstacle for the respondent and a risk for the reliability and quality of the data. One way of dealing with this difficulty in the cases of Brazil (2010) and the Plurinational State of Bolivia (2010-2011) has been the use of "assisted" diaries in which the diary is completed with the help of the interviewer (Aguirre and Ferrari, 2013, p. 35).
- Diaries also pose a challenge for population segments that have a weak statistical culture, since it is
 difficult for the respondent to assume the responsibility of filling out the entire questionnaire. This results
 in problems such as illegible replies or lack of detail in describing the activities. This situation can occur
 irrespective of the household s social stratum or income level.
- The validity of the data is highly dependent on the classification and rigorous coding of the activities, which can increase the cost of data processing. This is compounded by the cost of implementing data quality control mechanisms, for example if a person has not recorded any physiological activity in a 24-hour period.
- Full diaries become lengthy, especially when time intervals, whether 15 or 30 minutes, are used; and this can increase respondent fatigue (see box IV.4).
- Assisted diaries that use short time intervals generate suspicion or distrust owing to the level of detail
 required, which exposes people s privacy. However, the presence of the interviewer and his/her assistance
 in the use of diaries makes it possible to overcome problems of form (handwriting, language, etc.) and
 content in terms of the meaning of what is written.
- The respondent s capacity for abstraction becomes central, and this leads to differences in the quality of
 the responses by age, gender, education level and socioeconomic level. This has repercussions in terms
 of information loss, particularly in the dimensions of unpaid work and cultural consumption.
- Open-ended questions are highly sensitive to the repertoire of activities that the respondent has in mind; thus, completion of the diary not only reflects what the person did, but also what he/she remembers and believes is relevant to record. This situation is accentuated when a proxy respondent is used, since he/ she may ignore or underestimate the activities (for example, domestic and unpaid care activities) carried out by other household members (see section IV.B.7). Consequently, data collection in the survey cannot be standardized.
- The use of detailed diaries may reduce the response rate, increase the omission of information, or else reduce quality owing to respondent fatigue.

⁴ In the pilot time-use survey of the Plurinational State of Bolivia in 2019, it became clear that, in some mainly rural populations, most people do not use a watch and estimate time based on the movement of the sun.

- Activities that involve caregiving, or those that respondents perceive as secondary or less important, tend not to be included in the diary. In the case of caregiving, even if the respondent records the fact that he/she was caring for a household member, it is unlikely that the characteristics of the care-receiving population will be identified. It is also difficult to capture non-daily activities such as volunteer work.
- Retrospective diaries have shortcomings similar to those of activity-list questionnaires in terms of recall or subjectivity, since the respondent is not recording the activity as it occurs but at a later time.

Box IV.4

Trial questionnaire on time use in Chile

As part of the preparation of the 2015 Time-Use Survey in Chile, a trial questionnaire was deployed in 2013 for the application of the diary through face-to-face interviews. The results showed that people remember their activities based on episodes and not on exact stretches of time. Thus, using a diary that reflects chronological and linear time has disadvantages in terms of recall failure. In addition, some interviewers stated that the interview becomes longer and monotonous, which makes it more difficult to apply.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries.

(b) Activity-list questionnaire

The questionnaire based on a predefined activities list is a data capture tool in which the respondent declares the time he/she has dedicated to predefined activities, during a specific time interval. In such questionnaires, respondents are asked to estimate the amount of time they spent on a particular activity during a specific reference period, for example, the previous day, week, or month. The predefined activities list may either capture all possible activities or else be limited to a subset thereof; a question is designed to ascertain from respondents whether the activity (or activities, since a single question may inquire about several activities or tasks) is performed and the time spent on each one (Carrasco, 2016). For this methodology it is not necessary for respondents to be able to read and write, or for them to be clear about the chronology of events; but they do need to be familiar with measuring time by a clock (Seymour, Malapit and Quisumbing, 2020).

The activity-list questionnaire differs from the full diary because it only captures the total time spent on the activities, but does not record when they are performed or the sequence of activities. The activities list is a structured questionnaire with pre-set questions. It is generally implemented in two phases: it asks firstly whether or not the activity was carried out, and secondly how much time was spent on it.

The advantages claimed for activity-list questionnaires include the following:

- They can be designed and adapted to the needs and demands of a given country and context. Using an activities list makes it possible to prioritize certain activities that are relevant to public policy; and it prevents them from becoming invisible because they do not depend on the respondent s memory. The activities list can be designed according to the needs and demands for knowledge located in a specific local context. They are based on international classification parameters and can also include questions that provide information that is necessary and useful for the design of public policy responses to specific problems in the countries (Seymour, Malapit and Quisumbing, 2020).
- They make it possible to effectively measure the incidence of infrequent activities that cannot be identified with diaries (United Nations, 2004). Examples include volunteer work, specific care activities, sports or cultural activities, among others, which are specifically useful for public policy formulation.
- They measure care and the demand for care more effectively, because these tasks are, by nature, harder to visualize, and are better captured when asked about explicitly. This also makes it possible to characterize the care-recipient population, since it is possible to ask separately about the time spent caring for children, older persons, the sick or persons with disabilities. Moreover, if the target population includes all household members, it is possible to ask which household member received care.

- Closed questions enable respondents to answer the same question, so that the answers can be comparable.
 This narrows down the possible alternatives, generating less variability in the responses; they are also easier to answer, since they present a recognition task, unlike the recall task of open questions, where information can be lost through forgetfulness.
- Closed and pre-coded questions also make it possible to obtain the necessary information, without more complicated and costly subsequent activity coding processes.

However, activity-list questionnaires also have disadvantages that include the following:

- The results are sensitive to the number of questions; so, when comparing results between different countries and between different measurements of the same country, variations in the number of questions should be taken into account.
- The times recorded may be underestimated or overestimated. Activity-list questions introduce measurement errors arising from underestimating or overestimating the time spent on different activities. People may overestimate activities that are perceived as socially "good" or acceptable, and vice versa, (United Nations, 2004) or make errors in reporting because of recall difficulties.
- The times reported may not add up to the 24 hours of the day. An estimate that exceeds 24 hours per day may be due to the simultaneity of activities or to an error in estimating the time spent on each activity in the questionnaire. In contrast, a non-exhaustive activities list may produce a record of less than 24 hours. It is important to take this into account and undertake additional data processing with specific correction and control procedures for the economic valuation of unpaid work, the construction of aggregate indicators and time poverty calculations. In the data validation phase, it is important to cross-check time-use data with other sociodemographic variables, to assess whether over- or under-reporting correlates with other variables, which could introduce biases into the analysis.
- Activity lists are restricted to the predefined categories and their phrasing, so there may be activities
 that are performed but are not on the list, or wording the respondent does not understand at the time
 of the interview.
- While activity-list questionnaires, unlike diaries, make it possible to analyse differences in the average time spent on specific activities, they cannot be used to analyse how time is used throughout the day.
- Questionnaires based on an activities list do not identify activities that were not initially included in the list but could be relevant in terms of the time spent on them.

However, the choice between a full diary, a light diary, or a questionnaire with predefined questions depends on the analytical aims of the survey or module, the resources that are available, considerations about the characteristics of the population (level of statistical competence to respond to a diary, literacy level) and the interests of international comparability (United Nations, 2004).

4. Data collection method: in person, by telephone or online

This phase should also specify whether the information will be collected in person, by telephone or online. In collecting time-use data, and also in several traditional NSO operations, face-to-face interactions have predominated. However, the health emergency caused by the COVID-19 disease pandemic hastened the implementation of telephone operations as a viable tool for producing quality statistical data, especially in times of crisis.

The main advantage of capturing information by telephone is a significant reduction in the costs and time required for the operation, since it avoids the need for the interviewers to travel and simplifies the revisit process. However, conducting a telephone operation also involves limitations and challenges, such as deciding the registry from which the telephone numbers will originate, taking into account the sample design, restrictions on the length of the questionnaire for the survey to be viable, low response rates, and difficulties in completing surveys of all household members when a direct respondent is used, among others.

Application of this methodology should take into account specific features of the country, since the existence of regions where telephone coverage is not universal may lead to biased results, as it will be difficult to obtain a balanced sample that reflects the reality of all people.

Taking these factors into account, telephone operations can be very useful for collecting time-use data when budgetary constraints preclude a face-to-face interaction, or else as a rapid response to a moment of crisis (see section IV.D.1). Nonetheless, they are not the only alternative. Considering technological advances and the availability of new communications media, national statistical offices must constantly weigh up the possible use of these media to collect data for the future, including web-based or online measurements. In such cases, the design of the operation should take the aforementioned considerations into account to ensure the development of the operation and the quality of the information —such as by providing clear instructions to enable respondents to fill out the forms properly. Although this alternative poses challenges for some segments of the population that lack access to information and communication technologies (ICTs), it can be used as a complement to increase response rates.

5. Data collection mechanism: mobile devices or physical forms

A discussion that has taken place in recent years, since the introduction of data collection technology, concerns whether to use electronic devices or continue using physical forms.

The advantages of using mobile devices include the availability of information in real time, and elimination of the burden of paper for the person conducting the survey. Moreover, immediate coding of the activities facilitates the subsequent processing and treatment of data, which reduces the time and resources needed.

The use of electronic devices also enables greater and more effective control of data quality, by making it possible to identify incongruencies during the interview and, thus, immediately correct and adjust the data.

However, the use of mobile devices also has operational disadvantages, such as software failures or coding problems when passing the information from the field to the database. Moreover, the use of mobile devices is hampered by connectivity or insecurity issues in some regions. It is, therefore, recommended to have physical forms as backup for data collection in cases where mobile devices cannot be used, especially in remote areas.

Lastly, one of the most important issues to bear in mind concerns the time and resources needed to design and build an electronic questionnaire and the software needed to collect the data and transfer it to a database.

6. Data reference period

The reference period is the time span over which the data on the activities undertaken by the respondent are measured, for example the hours devoted to each activity in the week or in the day. In the case of a day, it is possible to ask about the previous day, a working day and a non-working day, or about a weekday and a weekend day. In general, however, the aim is to reconstruct and present the weekly hours spent on unpaid work, in order to compare them with the weekly hours of paid work.

(a) The day as reference period

When the day is used as the reference period, it is possible to ask for a random day, yesterday, a preassigned day, a working day and a non-working day, or a weekday and a weekend day. The experience of the countries shows that the main advantage of referencing a single day (rather than a whole week) is that it is easier for the respondent to recall and estimate the time. This advantage is accentuated when the day referenced is "yesterday," because the activities are still present in the respondent s memory (in the case of a direct respondent). Thus, choosing yesterday could enhance the accuracy of the information and approximate more closely to the real time spent on the activities (see box IV.5).

Box IV.5

Chile: cognitive tests for choosing the reference period in time-use measurements

Based on the question: "Which strategy makes it possible to obtain the best quality data, bearing in mind the reference period", the National Institute of Statistics of Chile (INE) developed a cognitive testing exercise to draw some conclusions to guide the choice of the reference period in time-use measurements.

In terms of the statement of participation or non-participation in the activities, three main factors were found to influence recall of the activity:

- The closeness of the reference period consulted affects the possibility of distinguishing between specific events and generic memories or other activities corresponding to a different reference period.
- The habitual nature of the activity influences both the recall of regular (routine) activities and of non-habitual ones (memorable because of their special nature).
- The personal or social relevance of the activities performed, such as proximity in time, affects the ability to distinguish between specific and generic memories.

In terms of the recording of time spent on the activities, it is important to consider that the process of preparing the time response involves the respondent in an estimation exercise, since for many activities, particularly those involving unpaid work, the actual time spent on them is not known with certainty. This estimation is influenced by the following factors, among others:

- The existence of structured schedules, such as work or school days, help in effectively recalling the same activities and in inferring the times of related activities.
- Habitual nature of the activity: as in the case of participation, time spent both on activities with routine times and on those that deviate significantly from routine facilitate recall.

There are also activities that are performed more than once in the same day or week. In these cases preparing the response is more complex and may involve a combination of three routes characterized by decreasing response qualities:

- The sum of k events with specific times, in cases where the respondent is committed to delivering a quality response.
- The sum of k events with a "typical" time.
- · The provision of a general estimate, in cases where the person is unable or unwilling to provide accurate information.

Choosing between these routes will depend on both the willingness of the respondent and the length of the reference period, since in longer reference periods this difficulty is projected on to all of the activities undertaken. Consequently, it was concluded that the use of a shorter reference period (day) can facilitate approximation to the real time spent on activities for the time-use data collection experience in Chile 2015.

Source: K. Muñoz, "Periodos de referencia en las encuestas sobre uso del tiempo. Análisis desde la metodología de encuestas," document presented at the Seventeenth International Meeting of Specialists on Time Use and Unpaid Work, Aguascalientes, 10-11 September 2019 [online] https://www.inegi.org.mx/contenidos/eventos/2019/rut/Sesion2/S2M5.KarllaMunozfn.pdf.

However, establishing a single day as the reference period complicates the subsequent calculation of the weekly working hours indicator, since the weekly value would have to be estimated from an analysis of the hours of a single day and would make the reported data less reliable. Moreover, it is necessary to ensure a balanced distribution of all the days of the week, which entails deciding whether to ask about yesterday or about an assigned day. If yesterday is used, managing the collection of a balanced sample can be complex and the data may require calibrations (expansion factor adjustments) to ensure a proportional distribution of each day. It will also be necessary to make the corresponding sampling adjustments to achieve a balanced sample, for example, between days of the week, so as to obtain indicators for a "representative day". In addition, to guarantee the representativeness of the seven days of the week, the field operation must be carried out from Monday to Sunday; and in some countries the hiring of staff on Saturdays and Sundays is complicated or adds to costs.

(b) The week as reference period

In contrast, taking the week as the reference period makes it easier to collect and process the data, by not requiring special treatment to ensure a balanced distribution of days in the sample. It also increases the chances of capturing participation in occasional activities, which could be underrepresented when asking about a single day.

Nonetheless, this may also mean the loss of quality in data on the time spent on the activities, since a longer reference period makes it more likely that an activity has been done more than once, which makes it harder to remember and prepare the response. Similarly, respondents tend to indicate the times of their immediate reality, in other words yesterday. Consequently, as experience shows, the interviewer has to permanently reinforce the reference period in question to avoid time distortions.

7. Target population, type of respondent, level of disaggregation and sample design

The target population is the set of people on whom the time-use data will be collected and will be represented in the survey. Time-use surveys usually apply a minimum age requirement and other characteristics, as determined by the analytical objectives of the survey (United Nations, 2004). The same characteristics that define the target population of other household surveys are generally used to delineate this population. For example, to estimate indicators on total work (paid and unpaid) consistently, the data collected on time use should be applied to the same target population as that of employment surveys (see box IV.6). In addition to age, other variables that define the target population include geographic, racial and ethnic, socioeconomic, and other dimensions.

Box IV.6

Latin America and the Caribbean: target population and type of respondent in time-use measurements

Time-use measurements in the region have used different age limits to define the target population. The selected ages range from 7 years old, in the case of Guatemala (2011), to 18 years old in Argentina (2013); but in most surveys the lower limits are 10, 12, 14 and 15 years old.

The pilot test implemented in the Plurinational State of Bolivia in 2019, for example, specified a target population of individuals aged 10 years and older. This showed that, although minors can provide more detailed information, it is not always easy to gain access to them for the survey, owing to distrust by their parents or guardians. Therefore, while considering that one of the objectives of the nationwide time-use survey is to "provide information on the interrelation between market work and unpaid domestic and care work" and that the official working age in the country is 14 years of age or older, it was decided to establish this population group as the target group for the nationwide time-use survey.

In the region, information was mostly collected from all members of the household who satisfied the target population criteria.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries.

(a) Type of respondent

The respondents are the individuals who respond to the survey and satisfy certain characteristics previously established in the design phase. They can be of two types: direct and proxy. When information is collected through a direct respondent, the questions should be answered by the person who engages in the activity in question; and it is he or she who declares his/her participation and the time spent on it. As the questions are of a personal nature and have a high level of detail, this can increase the reliability of the data, so this type of respondent is preferred. However, this can also introduce bias into the measurement of the phenomenon, since the profile of persons who respond to surveys generally tends to focus on certain characteristics, which if methodological adjustments are not made to correct this bias would impact the results obtained.

Moreover, the proxy respondent is a person in the household who will report on the participation and time commitment of the selected person or persons. Within the household, the respondent should be selected using pre-established criteria to enhance data quality, such as: being the member of the household responsible for domestic chores and care tasks, and who therefore best knows the dynamics of this work within the household. The use of proxy respondent may induce biases in the information provided by a single person who does not necessarily have detailed knowledge of the activities undertaken by all household members and the time they devote to them. It may also introduce biases owing to the perception the respondent may have of the contribution of other household members to certain tasks. Although this methodology reduces the costs of the operation and increases the response rate, it is desirable that the data on time use be collected through a direct respondent.

The sample design can provide for interviewing one member per household, more than one member (for example, in two-parent households, the main couple of the household), or all household members who meet certain criteria (generally based on the respondent's age). Selecting more than one member of the same household has the advantage that larger samples can be obtained by visiting fewer households. It can also reduce the cost of the operation, since a larger number of interviews can be held in the same visit. Moreover, having information from more than one member of the same household makes it possible later to analyse the relationships within the household and the distribution of unpaid work between its members. However, it also has shortcomings; for example, if the sample design entails interviewing all household members and a direct respondent is selected, it may be impossible to interview all household members on a single visit, thereby increasing the cost of the field operation because of the number of revisits needed to cover an entire household. Therefore, a revisit protocol should be established to guarantee the collection of information for the assigned reference period, according to the expected coverage and sample design.

(b) Sample design

In addition to the target population and the type of respondent, the statistical design process must specify the sample design and its size. Here it is important to ensure that data obtained are representative of the population, in accordance with the information needs and the particular characteristics of each country, without forgetting the statistical constraints, such as budget. With this in mind, it is possible to enrich and deepen the analysis of the data, if the design and size of the sample make it possible to compare time use by geographic domain (urban and rural), regions, ethnic and racial descent and other criteria.

As is the case with other surveys, time-use surveys require a random sample of households to be selected, to subsequently study both households and individuals. The sample design will take into consideration the domains of interest, key variables, confidence and precision, response rate, target population per household and design effect. The sample size should be clearly defined, according to the estimates to be made. For example, estimating time spent on domestic work generally requires a different sample size than when estimating time spent caring for persons with disabilities. In the case of time-use measurements, the design must also respond to "when" the information is collected and "over what period of time" (Durán and Rogero, 2009). This can be complicated when using a module within other periodic surveys, since the sample design does not necessarily respond to the information needed for time-use measurement.

Another important factor to consider is the equal distribution of the sample. The Economic Commission for Europe (UNECE) suggests that the collection of time-use data should avoid the seasonal effects produced by the time of year in which it is carried out, by covering a full year or at least all seasons. It should also capture the activities carried out and their differences on both working days and weekends (UNECE, 2013). Accordingly, depending on the data collection period chosen, it would be ideal to ensure the data are collected in a balanced way for all months of the year, all weeks of the month and all days of the week.

8. Simultaneous activities

Simultaneity occurs when a person performs two or more activities at the same time. Although statistical operations on time use do not always make it possible to record simultaneous activities, their measurement is relevant since they are an important part of people s daily activities; they involve a cognitive burden, increase fatigue and stress, and reduce the productivity of the person who performs them.

Although the reference period of the time-use survey is a day, the total time reported by the respondent may differ from 24 hours because of the existence of simultaneous activities. Measuring these activities poses a major methodological challenge for time-use surveys. This is because the data capture mechanism designed must allow their recording, a specific recall process is required of the respondent and the analysis of these times entails special considerations. In addition, depending on how the question is formulated, criteria need to be established for identifying the hierarchy of the activities carried out simultaneously.⁵

Data collection through diaries usually makes it possible to capture simultaneous activities adequately (see section IV.B.3.). When questionnaires based on an activities list are used, it is possible to ask in detail about the time spent on different main activities, and subsequently ascertain which were carried out simultaneously and the frequency of this simultaneity. Moreover, as caregiving activities and unpaid household chores are often done at the same time, specific questions can be included in this context. This enables an estimate to be made of the time spent by people on passive caregiving ("minding" or "being on call" while simultaneously engaging in other activities) (see box IV.7).

Box IV.7

Colombia and Paraguay: questions on simultaneous activities in time-use surveys

In the form used for the National Time-Use Survey (ENUT) of Colombia (2012–2013; 2016–2017) data on simultaneous activities were obtained by asking about the time allocated to each of the listed activities, through the question:

Of the activities you undertook on [...], did you do some of them simultaneously?

a. Yes, if so which and for how long?

b. No

Similarly, the time-use survey carried out in Paraguay in 2016 seeks to identify simultaneous caregiving (passive care) and other activities, through the following questions placed at the end of the section on care for other household members:

- 1. During the past week, did you provide care to any household member subject to permanent dependency and difficulty, while doing other things?
- 2. During the past week, did you look after any household member aged 0 to 5 while doing other things?
- 3. During the past week, did you look after any household member aged 6 to 14 while doing other things?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries.

C. Construction of the time-use survey

In this phase, all of the mechanisms, tools, processes and activities needed for data collection are constructed and tested, pursuant to the inputs and decisions made in the earlier phases. Accordingly, the collection mechanisms need to be prepared and specified. This means paper or electronic questionnaires, collection manuals and guides,

⁵ The hierarchy of simultaneous activities refers to the distinction between the main activity and secondary activities. In this context, the main activity refers to the most important one, or the one to which most attention or effort was given.

maps with sample allocations, hiring and training of staff for data collection and supervision of field operations, definition of the bases and software for data capture and analysis, and implementation of data quality controls for periodic follow-up and correction of incongruencies.

These activities are carried out before the field operation, to ensure all mechanisms and instruments for data collection are ready. Thus, after validating the questionnaire, it is important to design the data collection mechanism, based on the socioeconomic context and infrastructure of the territories in order to capture the information efficiently (see section IV.D). In general, the collection mechanism consists of printed forms or electronic devices, which should be tested to check the functioning of the questionnaire in terms of both content and flows, particularly in the case of an electronic form. Pilot tests are therefore conducted to check that all of the requirements and objectives specified in the survey design are being met. In addition, the proper functioning of the question flows must be verified in terms of: the characteristics of the unit of measurement, the performance of the operation (how much time should be allocated to the survey and how these times differ between urban and rural areas), the loading and generation of databases and the processes involved in transmitting data from the field to the central office, among others. It is also recommended that the questionnaire be evaluated by applying cognitive tests to check that the questions are easily and correctly understood by the respondent. This aims to eliminate errors or biases and make sure the information provided by the respondent is reliable. All tests should be conducted with sufficient time available to make adjustments to the mechanisms and instruments if necessary.

Based on the data obtained in the pilot tests implemented to analyse the viability and understanding of the application or questionnaire, the necessary adjustments or corrections must be made to meet the proposed objectives. The potential incongruencies, contingencies and other events that could be generated by the reality of the operation are also projected and anticipated.

Once the schedule and budget have been defined according to the information needs, the objectives and the coverage, activities are launched to recruit and hire operational personnel, defining the minimum educational requirements to carry out the assigned activities. Once hired, the personnel must be trained through virtual and/ or face-to-face training sessions where all the areas involved participate, and thematic, logistical and cartographic concepts and tools, among others, are provided. In these courses, the different roles, functions and obligations of the operating personnel must be defined and explained.

For the correct measurement of time use, it is important to sensitize and train all personnel involved in the statistical operation on the gender perspective and the importance of the statistical operation for progress toward gender equality. It is therefore useful to present and explain some of the indicators that have been obtained from the results of previous applications of the survey (if this information is available). Training should also highlight the published outputs generated, as well as the importance of this type of survey at the international level, its normative origin, as appropriate, and its relevance for dissemination, cultural change and action. An interesting example of inter-agency partnership at the preparatory data collection stage is provided by Costa Rica, which, in preparation for data collection with training for field staff on gender issues, has supported the national machinery for the advancement of women in preparing material to raise awareness of these issues.

Staff training should also address aspects of the statistical operation in detail, such as the classification of time-use activities, time estimation and simultaneity of activities, among others. It is also important to create mechanisms through which the contracted personnel can resolve all doubts about the operation and its development in the field.

Lastly, prior to and alongside the pilot tests and the field operation, weekly monitoring and follow-up procedures should be defined, such as the detection of inconsistencies in the thematic and logistical areas, in order to accelerate the learning curve of the interviewers through training and instances that allow them to comment and provide timely feedback and suggestions during the operation, thus reducing refusals to respond to the survey or to certain questions, or the loss of information.

D. Data collection

This phase involves the collection of data or statistical information required to meet the defined needs, taking into account all the actions planned, designed and constructed in the previous phases. As the operation moves forward, the information must be entered into a database with the appropriate specifications and characteristics for its subsequent processing, always applying procedures for validation of the data sets and protection of the information through backup copies. For the successful execution of the operation, it is also important to consider the following issues:

- Select and train the personnel who will be tasked with the corresponding collection activities, supervision and other functions.
- The performance of field personnel should be evaluated during the data collection process in aspects such as: reading the questions, explaining terms clearly and precisely, and managing time, among others.
- Preparation of a detailed schedule for the field operation, which makes it possible to anticipate how long
 the data collection will take. Together with the sample and coverage, the schedule should be evaluated
 periodically to determine whether the established times and objectives are being met, and, if necessary,
 take steps to adjust them. In this regard, it is essential that the operational team provide follow-up forms
 or prepare reports on the work done, as these make it possible to control quality and timeliness and, if
 necessary, serve as input for timely corrective actions.
- Anticipation of the challenges that application of the mechanism may raise once the field operation has begun. For example, the lack of network services, technical failures, loss of mobile devices or other contingencies could prevent the survey from being completed on a mobile device. It would therefore be useful to have physical forms available. Moreover, access difficulties for survey staff in remote territories must also be considered.
- It is important to put a strategy in place to reduce the number of rejections and clarify the revisit procedure, in order to ensure the highest possible response rate. The response rate should also be constantly monitored during the operation, with a view to identifying the reasons for rejections and establishing strategies to reduce them. These could include holding complementary telephone or online interviews.

1. Issues to be considered for data collection in times of crisis

In times of crisis, information becomes even more important, as it is a fundamental input for the construction of policies and measures to respond to an unexpected situation. However, in such situations, producing this information becomes more challenging for NSOs. For example, during the COVID-19 health emergency, NSOs have had to quickly adapt their traditional operations to avoid interruptions to the production of information; and they have had to create new operations to expose the current realities faced by people.

People s use of time changes in contingency situations, because many activities cannot be suspended (for example, domestic and care activities), and households have to reorganize to carry them out. Therefore, in times of crisis it is important for NSOs to create rapid responses on time-use data, when their capacities and priorities allow, and the need for conjunctural information so requires (see box IV.8). These responses could include the following, among others: (i) an update of information through a panel of a previous time-use survey application; (ii) the inclusion of questions on time use or workload in a new operation designed in response to the crisis; (iii) publication of advance results if the operation is under way and (iv) adjustment of the operation to guarantee application if it was already planned (see the experience of Colombia in box IV.9). In this regard, the phone-based operations could be very useful to produce information at low cost, without the need for the logistics associated with a face-to-face operation or altering data quality (see section IV.B.4.).

Rapid gender assessment surveys in Chile, Colombia and Mexico

To gain an understanding of the differential impact of the coronavirus disease (COVID-19) pandemic crisis on women s lives compared to those of men, UN-Women has headed a number of initiatives to collect data on the situation of people in terms of economic impacts, the distribution of domestic and care tasks in the household and difficulties in accessing basic goods and services. The instrument created for this purpose, known as rapid gender assessment, was implemented through the Women Count programme in at least 55 countries in different regions: Asia and the Pacific (11), Europe and Central Asia (16), Arab States (9), West and Central Africa (8), Eastern and Southern Africa (8), and Latin America and the Caribbean (3). The Latin American countries that participated in the exercise were Chile, Colombia and Mexico.

The rapid gender assessment surveys are divided into at least five broad areas, through which to characterize individuals and the impact the pandemic has had on them:

- Knowledge of COVID-19: context questions are formulated to familiarize the person with the subject under study —in other words, the impact of COVID-19.
- Employment and income: seeks to ascertain the current and pre-pandemic employment situation of the person, including formality status. It also asks whether or not the person has received support from the government or any other institution.
- Activities and distribution of household chores: the surveys investigate whether the crisis has led to changes in the time spent on domestic chores and care tasks performed in the home.
- Access to basic services: seeks to identify whether or not people have experienced difficulties in accessing basic goods and services (health, sexual and reproductive health, education, access to ICTs and security).
- Sociodemographic characteristics: characterizes the respondent by age, marital status, etc. These questions are placed at the end of the data collection instrument to avoid conditioning any response at the beginning.

In addition to these broad areas, each country could include any other topic it considered relevant. In the case of Latin America, only Chile chose to add one more topic and included questions on technology and the Internet.

Summary of the rapid gender assessment survey approach in Latin America

Structure	Data collection method	Respondents	Representativeness
- Knowledge of COVID-19 - Employment and income	Self-administered online survey (Chile) and mixed telephone interviews	Men and women of legal age (18 years or older)	National coverage
- Activities and distribution of household chores - Access to basic services	(Colombia and Mexico)		
- Sociodemographic characteristics			
- Technology and Internet (Chile)			

Owing to the mobility restrictions adopted to counter the COVID-19 pandemic, rapid gender assessments have been conducted remotely, by Internet, phone call or SMS. They ask simple, straightforward questions and are low-cost, quick and easy to carry out. The main strength of these surveys is that they provide timely empirical evidence to identify needs for the design and immediate implementation of public policies. However, given time and sampling constraints, rapid gender assessments cannot provide data that reflect the situation of the entire population. As a rapid assessment, therefore, the focus is not on exact measures, but on relative change since the emergence of the COVID-19 pandemic. Surveys of this type also lack the statistical rigour of official statistics, so they simply aim to provide immediate signals about the current situation and supplement the efforts that NSOs and the national machineries for the advancement of women of women are making.

Rapid gender assessments are an important instrument for strengthening information systems and for breaking the statistical silence on the differential effects of the pandemic on men and women. They are also a powerful tool for informed decision-making and for the design of public policies targeting women s empowerment.

Source: United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), Gender-differentiated effects of COVID-19 on sustainable development: Comparative analysis of rapid gender assessment surveys in Chile, Colombia and Mexico, 2021.

Time-use survey in the midst of the COVID-19 pandemic in Colombia

The third application of the National Time-Use Survey (ENUT) in Colombia began on 1 September 2020 and ended in August 2021. In other words, the data were collected in the midst of the coronavirus disease (COVID-19) pandemic. Given this situation, a short module was added to the form to collect information on the situation of persons confronting the health emergency. Measures were also designed to guarantee the quality of the information collected in the field operation and avoid the spread of the virus. These include: prior sensitization of the interviewees, to promote their participation in the survey, use of biosecurity protocols, contingency plans for the infection of personnel and offering the persons surveyed the possibility of responding by telephone, as a last resort. These measures have enabled the initial months of the operation to be carried out successfully, guaranteeing the expected response rate and coverage.

Source: National Administrative Department of Statistics (DANE), Boletín Día Internacional de la Educación No Sexista, 2021.

In view of the recent situation, considerations that should be taken into account for data collection in the specific case of a health emergency, in this case due to the COVID-19 pandemic, include the following:

- A biosecurity protocol needs to be established, based on international standards and the internal regulations of each country, to protect operational personnel and respondents. Therefore, framed by the budget and execution of the operation, the necessary protection elements must be provided to all field workers.
- Contingency plans must be designed in the event of possible infection of the operating team, in order to prevent the virus from spreading and affecting the operation.
- It is necessary to implement communication strategies designed to build relationships and raise awareness among households, including items such as posters, brochures, letters, guides and presentations that encourage participation by the population being surveyed.
- Households that refuse to be interviewed in person can be offered the possibility of an interview by telephone, through websites or online, in order to ensure their participation in the survey. However, this is a last resort and its feasibility will depend on the length and characteristics of the survey, and on the degree of connectivity of the target population. It is important to evaluate whether this option should be avoided to prevent the survey results from being affected (see section IV.B.4).

E. Processing of the data

In the processing phase, the data must be reviewed, validated and purged for subsequent analysis and dissemination as statistical results. To ensure quality, it is very important to conduct consistency checks and purge the information contained in the database. These should identify potentially incorrect data and check their veracity, since there may be typing errors or omissions of information that persist even when controls have been applied during fieldwork. It is also useful to cross-check different variables to corroborate the consistency and coherence of the information and identify potential errors, in accordance with the validation criteria and parameters established in the previous phases.

During the processing, the questionnaire variables are also classified in the pre-defined categories. Aggregate statistical variables are then constructed from the original survey variables, with which it is possible to validate their consistency with previous versions of the time-use survey when applicable.

If necessary, in this phase, weights are calculated and mechanisms are implemented to impute missing data, since the conceptual framework and approach of this type of survey is usually different from that of other household surveys. In this process it is important to avoid biases, so missing values should be imputed using a robust and pre-established methodology rather than based on assumptions or stereotypes. It is important to sensitize and train the responsible personnel to avoid such biases (see the experience of Costa Rica in Box IV.10).

Validation of time-use data in Costa Rica

In the National Time-Use Survey of Costa Rica in 2017, the personnel tasked with data coding and validation were previously trained by a specialist in time-use measurement, a person tasked with supervising the coding and another person responsible for the survey's computer systems. A review protocol was established based on the following dimensions:

- (i) Coding of the occupation of the employed population.
- (ii) Review of general and specific observations made by supervisory, interviewer and quality management staff.
- (iii) Review of ranges by hours per week and verification of possible simultaneous activities.
- (iv) Review of hours for each section to identify time surpluses or deficits or missing time in specific sections.
- (v) Validation of the consistency of the data recorded in the module on persons or institutions that provide care to household members, and the relationship with the modules on care for children under 12 years of age, care for persons 12 years of age and older, and care for other totally dependent household members.
- (vi) Review of incongruencies to corroborate information and reduce errors.
- (vii) Review of responses recorded as "Other activities", to determine whether they in fact refer to a new activity or should be included in one of the activities already contained in the questionnaire, pursuant to the classification of time-use activities.
- (viii) Export of the validated information from each questionnaire to a data management software file, in which the final review of the data and its consistency is performed to undertake the corresponding processing for analysis.

These systems allowed for greater rigour in all stages of data collection and processing. Thus, once the processing stage was completed, 96.6% of the information was classified within the time ranges established as acceptable, 2.0% was considered in a state of alert and 1.4% was considered critical (see the explanation of these categories in box II.2 of this publication).

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries.

F. Analysis of the data

In this phase, the main results of the statistical operation are estimated, relative to the objectives set. The data are transformed into statistical indicators (see box VI.11) and descriptive analyses that will later be disseminated, to enable the analysis of time use in the country and serve as inputs for the construction of related public policies. During the indicator construction process, it is very important to ensure the reliability of the information, analysing and taking into account the frequency of each question, while also establishing the threshold for the expected coefficient of variation for which the data is considered acceptable.

In this phase, it is extremely important to ensure the necessary disaggregations for the comparison of the results for different population groups, in accordance with the representativeness of the sample. In this regard, it is suggested to include disaggregations by sex, age group, geographic location, ethnicity and income quintile, among others, that promote analyses with a differential and intersectional approach (see the experience of El Salvador in box IV.12). These disaggregations should be included as long as the sample allows for the representativeness and precision of the estimates needed to guarantee the reliability of the results.

Basic indicators to be considered in time-use measurement

Some of the key basic indicators that can be produced from the data captured in a time-use survey are presented below:

• Participation rate: percentage of the target population that spent time on a given activity during the reference time interval. This should be estimated for paid and unpaid work activities at least.

$$Participation \ rate = \frac{Number \ of \ persons \ working \ full \ time \ in \ the \ activity}{Total \ number \ of \ persons \ in \ target \ population} * 100$$

· Average social time: average time spent by the target population on a given activity.

Average social time =
$$\frac{\sum time \ spent \ on \ the \ activity \ by \ the \ entire \ target \ population}{Total \ number \ of \ persons \ in \ target \ population}$$

· Average effective time: average time spent on a given activity by persons who reported having engaged in the activity.

Average effective time =
$$\frac{\sum time\ spent\ on\ the\ activity\ only\ by\ persons\ who\ engaged\ in\ the\ activity}{Total\ number\ of\ persons\ engaging\ in\ the\ activity}$$

· Total work time: average time spent by individuals on work activities (paid and unpaid).

Indicator 5.4.1 of the global indicator framework for the Sustainable Development Goals and targets of the 2030
 Agenda for Sustainable Development: proportion of time spent on unpaid care and domestic work, disaggregated by
 sex, age and location.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Economic Commission for Latin America and the Caribbean (ECLAC), "Total work time", Gender Equality Observatory for Latin America and the Caribbean, n/d [online] https://oig.cepal.org/en, and United Nations, "Indicator 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age and location", 2021 [online] https://unstats.un.org/sdgs/metadata/files/Metadata-05-04-01.pdf.

Box IV.12

Analysis of time-use data in El Salvador

Following the National Time-Use Survey of El Salvador (2017), a number of indicators were obtained, such as participation rates, average effective time and indicator 5.4.1 of the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. In addition, the percentage distribution of hours was obtained, which represents the proportion of total time spent on each activity, for the population aged 12 years and older.

Cross-referencing with sociodemographic, employment and income variables was also performed, to make intersectional analysis possible. The disaggregations made included the following:

- · Geographic location: urban and rural zones.
- · Age range: in groups of 10 years.
- · Educational level: grades passed.
- · Income: income quintile and poverty status.
- Overcrowding status.
- Type of unpaid domestic and care work activity.
- Care according to degree of dependency, classified into three groups: persons in potentially dependent age-groups (from 0 to 14 years old and over 59 years old); persons subject to permanent dependency (for example, persons with disabilities) and care for persons of productive age (15 to 59 years old).

Box IV.12 (concluded)

In relation to the quality of the estimated indicators, the ENUT of El Salvador took the following parameters into account:

- · Point estimate: population parameter obtained from sample data.
- Interval estimation: range in which the parameter will be found for the population of interest, established at a 95% confidence level. The expectation is for a narrower confidence interval, therefore, greater precision of the estimated value.
- Standard error (SE): this measures the precision of the estimation. It is random and measures the degree of precision of the population parameter obtained from the sample data relative to the true value. An acceptable value depends on the magnitude of the estimates.
- Relative standard error or coefficient of variation (CV): this represents the standard error as a percentage of the value of the estimate. Its practical use is when there are differences in the scale of the estimate and the standard error. For the ENUT of El Salvador, it is preferable that it does not represent more than 20% of the value of the estimate.
- Design effect (deff): This indicates the efficiency loss of the complex sample design compared to a simple random sample design. Generally, it is greater than 1 in complex designs; if it is less than 1, efficiency is gained; however, the value to be considered acceptable is left to the user's discretion. A standard value could vary between 1 and 2.

Source: Department of Statistics and Censuses (DIGESTYC), Encuesta Nacional de Uso del Tiempo 2017: Principales resultados, 2017.

G. Dissemination of the data

In this phase, the time-use findings obtained from the survey or module are disseminated and communicated according to the previously designed communication strategy or plan. This is very important for the positioning and use of the data in the national and international agenda. It is essential to provide users with the documentation supporting the statistical operation, to facilitate understanding, access to, and use of metadata, microdata and editorial products. The publication of these items can follow the standards of the National Data Archive Catalogue (ANDA).

It is also very important to design differentiated dissemination strategies for the various target audiences, such as the academic community, public policymakers, gender specialists, and the general public, among others. Thus, the communicative objective, the selection of strategic figures to be included, the language, and the technical level, among other characteristics, should be determined and selected according to the characteristics of the users. If possible, various dissemination tools and products should be designed and developed to enable broad and appropriate communication of the results obtained (see the experience of Cuba in box IV.13). In this sense, the dissemination of the findings among public policymakers is an essential step towards integrating this information in actions to close gender gaps. Countries that have made progress in implementing comprehensive care policies have mainly used the information generated by these measurements, strengthening the gender perspective in these designs (see section VI.B).

Box IV.13

Dissemination of the results of time-use measurement in Cuba

The results of the time-use and care module of the National Survey on Gender Equality in Cuba have been disseminated through analytical publications, such as official reports on the results, various infographics and articles in digital publications of various media.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the countries reports.

H. Evaluation of the process and lessons learned

The evaluation and monitoring of each stage of the statistical operation is very important for data quality. A qualitative and quantitative evaluation of the statistical quality of the survey, prepared on the basis of a regular procedure, should be part of the protocol for presentation of the survey data and results. Consequently, the statistical process should be monitored and evaluated as each stage is executed, with a view to detecting strengths, weaknesses and opportunities for improvement that will facilitate the feedback of the statistical operation in its subsequent iterations and periodic follow-up of the actions implemented.

In this last phase of the statistical process, fulfilment of the specific objectives based on the information needs should be determined relative to the results of the statistical operation. Taking into account the methodological criteria defined in the design stage and the partial evaluations carried out during the development of each of the phases, it is advisable to document the process in a final evaluation report, to make it possible to identify and prioritize improvement actions based on the findings.

This section describes some of the difficulties identified and lessons learned from the application of time-use survey in the region:

Population heterogeneity within the country

The diversity of populations and territories within the same country may make it difficult to identify certain activities. Owing to the social constructs and dynamics of each region, the interpretation of the questions may vary from person to person. For example, in rural areas it is difficult to distinguish between time spent in agricultural activities for own-use and time spent in agricultural activities for the market.

This consideration should be taken into account in the design of the form, so that, through specific questions formulated in a language that is understandable by all populations, it is possible to clearly distinguish the time spent on all activities.

2. Operational problems in the fieldwork

Fieldwork decisions can have multiple consequences, including in terms of costs or the budget execution of the operation. The considerations to be taken into account include the following:

- Application of the survey to the direct respondent and all household members requires several arrangements
 especially in terms of financial resources. For example, it is necessary to define revisit strategies that
 increase the costs of the operation and may make it difficult to assign the reference period; or the interviews
 may take longer than expected, so that costs increase along with the possibility of rejections. However,
 the use of direct respondents is of utmost importance to obtain quality information on individual time use.
- Unlike with electronic devices, the use of physical questionnaires during the survey prevents field validation
 of the data entered, which may increase the proportion of incongruencies in the data collected. Thus pilot
 tests and validations of the mechanism to be used are important for reducing this. A procedure should
 be established to monitor and follow up on the information during the data collection to expedite the
 returns and, if necessary, make new validation or correction visits.

3. Problems with the information technology system

The use of information systems for data collection poses a number of challenges, including those detailed below:

The time-use survey requires specific software that differs from those regularly used in household surveys, to be able to capture information on the activities performed in the reference day or week in time format (hours and minutes). Thus, for example, the software applied to time measurements requires validations for non-standard

use, such as alerts about suspicious responses (for example, if the respondent reported zero hours of sleep in a 24-hour period). The design of the software and the necessary computer modifications require time and financial resources.

Similarly, software problems, such as errors in the data upload, download and transfer system, increase the time needed for revision, validation and publication of the results (see box IV.14).

Box IV.14

Challenges encountered in time-use measurement in Brazil

The process of applying the module on time use in the Brazilian National Household Survey (PNAD) 2009–2010), revealed a number of challenges for the collection of data on time use:

- (i) The social heterogeneity of the country made it difficult to codify identical activities, since they were recognized under different names by the country s various population groups.
- (ii) When the persons selected as informants were not at home, some interviewers replaced the respondent with another member of the household who was present at the time of the visit or changed the assigned day of the week, without authorization or consultation, thereby modifying the survey sample.
- (iii) Errors were recorded in the uploading and downloading of the diaries, and also in the transfer of data from the collection device to the computer. This made it necessary to check using the name of the respondent and to compare the information available in the physical diary with that present in the system.

These and other problems encountered in the software contributed to the fact that the results of the module ultimately were not published officially.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the information sent by the countries.

4. Problems related to the technical teams

The teams that participate in the application of time-use surveys must make sure that sufficient and quality information is obtained. Some differences in the results may not be related to the characteristics of the respondents, but to the unequal performance of personnel in the field. The turnover of field teams during lengthy operations implies retraining in the midst of the operation and increases the possibility of disparities in the application of the survey.

Factors in the field staff s work that may alter the survey results include the following:

- (i) Difficulties in communicating the objectives of the operation to the respondent, thereby undermining willingness to collaborate.
- (ii) Errors in the application of the survey to the selected respondent or the assigned reference day.
- (iii) Questions formulated differently from those presented in the questionnaire (e.g., without mentioning the reference period or changing the wording).
- (iv) The language used to communicate with the respondent.
- (v) The examples used to resolve the respondent s doubts.
- (vi) The instructions provided to the respondent by the interviewer.

Considering these factors and that time-use surveys have different characteristics than those of the surveys normally applied by NSOs, special attention should be paid to the training required for the teams that work on the survey, especially for the field operation. Among other things, this training should include clear explanation of the general context of the care economy, concepts of time use, explanation of activity classifiers, management of simultaneity of activities, mastery of basic arithmetical operations to assist the respondent with the calculation of time, awareness of the gender approach and presentation of results of past applications when possible, to demonstrate the importance of the information obtained from the survey, among others. In addition, during

fieldwork, supervision and monitoring mechanisms should be strengthened, following strict protocols for verification and validation of information collection in the field, for early detection of errors or omissions and their respective correction in the field. This can be done, for example, by recording interview excerpts and random revisits, among others.

5. Problems in capturing specific populations

The collection of data on different population groups is a major challenge for statistical operations. In the case of time-use surveys, there can be challenges in correctly capturing data on the activities performed by population segments such as: children, older persons and persons with disabilities, given that they may have limitations in terms of reporting the information directly, such as weaker recall of activities or communication difficulties. Accordingly, this must be done through another member of the household.

The collection of data on ethnic groups also poses specific challenges: (i) if the aim is to have representative information for ethnic diversity, it is important to consider the size of these population groups in the formulation of the statistical framework and the sample design; (ii) if the language of the ethnic group is different from that of the form as designed, the instruments (including the previous sensitization material) should be translated into the language of the target population or have interpreters participate in the operation (or both), who should be included in the training process on the objectives of the survey and the collection of information; (iii) account should be taken of the structure of the society and its customs for the design of workflows and authorization should be requested from the traditional authorities to carry out the operation and (iv) the inclusion of questions that reflect the traditional activities of the different ethnic groups should be considered (see the experience of Mexico in box IV.15).

Box IV.15

Incorporation of the indigenous population in the National Time-Use Survey (ENUT) of Mexico

The general objective of the 2019 National Time-Use Survey (ENUT) was to provide statistical data for the measurement of all forms of work, both paid and unpaid, of the population aged 12 years and older in urban and rural areas and indigenous populations.

The different criteria or guidelines used to refer to the indigenous population include the following: attachment to the ancestral territory and natural resources of these areas, self-identification and identification by others as members of a distinct cultural group, a common indigenous language that is different from the national language, presence of customary social and political institutions, and subsistence-oriented production. However, the variables used in censuses and surveys to measure this population are different, as in the case of speaking an indigenous language and ethnic affiliation.

Like its predecessor in 2014, the 2019 ENUT was representative of the indigenous population (a total of 1,798 households in localities with a predominantly indigenous language-speaking population out of the 26,631 that made up the sample). The data obtained made it possible to generate indicators of interest on total work time (work for the market, unpaid household work and production of goods for exclusive household use) among indigenous language-speaking women and men.

Source: National Institute of Statistics and Geography (INEGI), Encuesta Nacional sobre Uso del Tiempo (ENUT) 2019: Diseño conceptual, Mexico, 2020.

6. Resource difficulties in guaranteeing continuity in the application of time-use measurement

The difficulty in allocating the economic resources needed to implement this type of survey is an obstacle to its application. It is also a key factor in decisions made in the different phases of the statistical process, such as the periodicity of the measurements, the modality (implementing a stand-alone survey is more costly than using a module that is attached or complementary to the household surveys already planned), the length of the questionnaire and the representativeness of the sample, among other issues (see the experience of El Salvador in Box IV.16).

Guarantee of resources for time-use measurement in El Salvador

Thanks to the institutional commitment to collect data on the use of time in El Salvador, resources from the General Budget of the Nation are assigned to undertake specialized surveys with a gender perspective, including the National Time-Use Survey.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of reports submitted by the countries.

7. Definition of the time of the year and its influence on results

If the survey or time-use module is not implemented throughout the year, the results must be evaluated bearing in mind that these are sensitive to the period of the year in which the data are collected —for example, the end of the school year and the vacation period, among other factors. In this context, distributing the sample equitably over the entire data collection period and all days of the week becomes more important, as does the subsequent evaluation of the magnitude of these effects on the results.

8. Problems with time estimation among the interviewees

It is possible that the interviewees may have difficulties identifying how much time they dedicated to each of the different activities described in the questionnaire, or in estimating the time they spent exclusively on the activities, considering the frequency of simultaneous activities. Moreover, when the reference period is a week, the estimation may require operations to obtain a final value. In this context, it is essential for the interviewer to adequately indicate the activities to be reported on exclusively, and to assist the respondent in the recall and estimation process.

Although the reporting of times spent on simultaneous activities means that the total individual times do not always add up to 24 hours in cases where the day is the reference period, or 168 hours in the case of a week, controls need to be put in place to detect highly atypical records that may be due to errors in the data collection process.

It is therefore important to produce reports on the findings and difficulties encountered during data collection and processing, once the operation is completed. This will enable lessons to be learned and improvement plans to be put in place for subsequent applications of the survey or module.

Greater prioritization of time-use surveys in national statistical systems

It is sometimes difficult to highlight the importance and statistical richness of time-use measurements, or to position them alongside other major statistical operations in the country. Accordingly, the dissemination of the statistics obtained from the survey plays a fundamental role. Recommendations for taking this into account include the following:

- (i) In addition to producing technical publications reporting the main indicators obtained from the survey, it is useful to disseminate information with eye-catching, accessible and easy-to-understand designs for non-specialized audiences through "non-conventional" channels such as social media networks.
- (ii) Forge alliances with the academic community or civil society to create mechanisms for analysis, discussion and dissemination of the results obtained.
- (iii) Make the best possible use of the information collected in the survey, through specialized studies.

- (iv) Devise alternative ways to access information, such as data viewers, among others.
- (v) Expand dissemination of the multiplicity of uses of this information: gender analysis, satellite accounts, measurement of all forms of work, inputs for public policies to eradicate poverty, creation of care systems and infrastructure and transportation policies, among others.

10. Underestimation of care work

When designing the collection of data on care work, steps should be taken to avoid underestimating times, bearing in mind that passive care activities may be performed simultaneously with domestic or other work activities.

Sometimes the sample design does not make it possible to obtain representative information for people in situations of dependency, such as older persons or persons with disabilities, which would make it possible to adequately characterize the care they receive.

It is also possible that the respondent overestimates the time spent on care work, so it is important to identify and correct these biases in all phases of data collection.

11. Complements with other sources of information

The information obtained from time-use surveys provides a partial picture of the care economy. Exploring the data contained in the administrative records of institutions that provide public care services can complement and broaden the analytical panorama of the care economy that operates outside the home. The care economy can also be characterized through economic surveys or statistical operations targeting economic establishments, since they provide information on the care services offered by the private sector in the market.

Chapter V

Minimum set of time-use activities for Latin America and the Caribbean: an instrument for progressing towards international comparability

Most Latin American countries currently use a methodology based on a questionnaire and a set of activities that encompass paid work, unpaid work and personal activities (activities list) to measure the use of time by individuals in households. However, as noted in chapter II of this guide, and despite the widespread use of the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL), the surveys differ in several methodological respects, including the number of activities for which data is captured, the number of questions and levels of disaggregation, the order of the questions and the way they are asked. All of this affects the comparability of results between countries.

This chapter presents a minimum set of time-use activities for Latin America and the Caribbean (minimum activities list), together with a questionnaire for capturing information on them (time-use measurement). The objectives of these instruments are to:

- · promote the comparability of time-use measurements in the region;
- facilitate the reporting of global indicators (such as the SDG 5.4.1 monitoring indicator), regional indicators (such as total work time) and national indicators; and
- contribute to the construction of indicators for monitoring national public policies that place a value on, reduce and redistribute domestic and care work and enhance women's economic autonomy.

These instruments were developed on the basis of the specialized literature, methodological documents on measurements in the region and global guidelines on time-use measurements; but they were based fundamentally on the countries' own experiences, needs and reflections that emerged from the internal discussions of the Working Group on Gender Statistics of the Statistical Conference of the Americas. The thoughts of the time-use specialists who have participated in the International Meetings of Specialists on Time Use and Unpaid Work over the last 18 years were also compiled.

This section also puts forward a list of questions to cover the activities agreed upon in the minimum checklist, in a standard time-use module format that could be included in a periodic survey. Several important considerations for the use of this list are also included.

A. Background: the proposed minimum harmonized instrument for collecting time-use data of the Statistical Commission of the United Nations

In March 2020, the Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics of the United Nations presented a preliminary proposal of minimum activities required in the measurement instrument, with the aim of harmonizing time-use data collection and thus ensure greater comparability between countries.¹

Given the heterogeneity of the types of data collection instruments used in the different regions of the world, the group proposed a minimum list that makes it possible to construct indicators based on comparable activities, regardless of whether a pre-coded diary of activities or an activities list is used.

The proposal made in the framework of the Statistical Commission consists of two parts. The first corresponds to a set of questions to capture the economic and occupational characteristics of the respondents; this is based on making operational and codifying the activities according to the divisions of the International Classification of Activities for Time-Use Statistics (ICATUS), as follows: (i) employment and related activities; and (ii) own-use goods production. For this purpose, the economic characteristics considered "essential" to be captured during the time-use data collection were defined, along with "optional" characteristics to enrich the analysis of the time-use data. The questions were developed for illustrative purposes and are aligned with recommendations of the International Labour Organization (ILO) for capturing employment and own-use goods production, as defined in the resolution of the nineteenth International Conference on Labour Statistics (ICLS), concerning labour statistics, employment and underutilization of the labour force.

The second part of the document contains a minimum list of time-use activities that has been prepared to make it possible to produce time-use statistics in line with ICATUS 2016, based on information from 15 pre-coded diaries used by countries around the world and 15 questionnaires that used an activities list in Latin America and the Caribbean. This minimum set proposes to incorporate three production activities, seven unpaid domestic work activities, two unpaid care work activities, eleven personal activities, one travel-related activity and another residual category. Domestic and unpaid care work activities are those needed for the collection of data to calculate SDG monitoring indicator 5.4.1.

B. Constraints on achieving comparability on the basis of a regional minimum list

Although the existence of a standardized activities list enhances the comparability of statistical results between countries, three issues are discussed below that impose potential constraints on comparability and, therefore, should be borne in mind when using them and interpreting their results.

Inclusion of questions with a higher level of disaggregation than proposed in the standardized list

The aim of this proposal is to provide a minimum set of activities that can be applied in a flexible way that enables the countries of the region to adapt them according to needs. The list proposed here does not preclude a country from adding questions to the minimum list. It is therefore important to consider that the addition of activities may influence the answers, and thus affect the standardization of the set of questions. This problem arises in

¹ For further information on the proposed minimum harmonized instrument for the collection of time-use data of the Statistical Commission of the United Nations See [online] https://unstats.un.org/unsd/statcom/51st-session/documents/BG-Item3m-MinimumHarmonizedInstrument-E.pdf.

cases where the additional questions are placed before the standardized list, which can cause duplication in the record; and their effect is greater if they are more specific than those contained in the list (activities versus categories). Therefore, if it is decided to use a set of questions with more highly disaggregated activities, it is advisable to maintain the structure of classifiers used in the International Classification of Activities for Time-Use Statistics (ICATUS) and CAUTAL. For example, if the minimum list proposes questions at the one-digit level and it is desired to investigate a given category in greater depth, it is possible to ask questions at the two-digit level (for example, for care activities) and maintain the criterion that the activities being asked about are mutually exclusive and exhaustive.

It is also important to consider the overall length of the questionnaire, because each additional question implies a cognitive effort for the respondent and affects the quality of the replies.

2. Possible differences in phrasing or explanatory notes

A few small differences in phrasing between countries can cause differences in how an activity is understood, and hence variations in the time span to be estimated (Schwartz, 2002;² Foddy, 1993). Similarly, a standardized list, without the assurance that the activities consulted are understood in an equivalent way in the different realities, can produce the same effect.

Thus, the challenge for the countries is to consider making changes to the wording to ensure that the respondents in the different countries interpret the questions in the same way, even if the questions are worded differently.

3. Existence of different reference periods between surveys

Although the discussion of reference periods is not the focus of this section, it is important to note that, even when using a standardized activities list, the use of different reference periods between countries will affect data comparability. This difference affects the memory of having participated in an activity (participation rates), because the longer the reference period, the greater the probability of given event occurring. It also has repercussions on issues related to the time spent on the activities consulted, since activities performed several times require the estimation of times to be repeated (Muñoz, 2019), thereby increasing the possibility of error in the responses, due to over- or under-reporting, as a function of the lengthening of the reference period (Sudman and Bradburn, 1973).³

C. Minimum Set of Time-Use Activities for Latin America and the Caribbean

The proposed Minimum Set of Time-Use Activities for Latin America and the Caribbean (minimum list) is based on the document proposed by the Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics of the Statistical Commission of the United Nations and is enriched and adapted to the specifics of the region. Because time-use data in Latin America and the Caribbean has been applied mostly in the analysis, design and evaluation of economic and social public policies, particularly in the area of unpaid care work, the regional minimum

Research conducted by the Bureau of Labor Statistics, motivated by the intuition that passive caregiving was not being quantified correctly in the activity diary used in the American Time Use Survey (ATUS), concluded that a specific question was needed to capture these activities. In the process for incorporating this question, two alternatives previously raised by respondent focus groups were tested: "in your care" and "looking after". When comparing the time reported for the different questions, respondents who were presented with the alternative "in your care" recorded an average of 5 hours and 23 minutes, while those who answered the "looking after" option recorded an average of 1 hour and 42 minutes. When investigating the causes of these differences, the researchers found that the respondents decoded the second option in a more restricted way, limiting their answers to the time in which the children were "in sight", while the first alternative was understood as "taking care of and being responsible for the child" (Schwartz, 2002).

³ The most useful concept for recall periods used in survey research is Weber's Law, which suggests that errors in the perception of time will be a function of the logarithm of the time period in question.

list was designed to capture the care needs of different population groups. Accordingly, the proposed regional minimum activities list has a greater breakdown of care activities and, as a result, is broader (31 activities) than that proposed by the United Nations Statistical Commission (25 activities) (for further details on the relationship between the two proposals see annex V.A1).

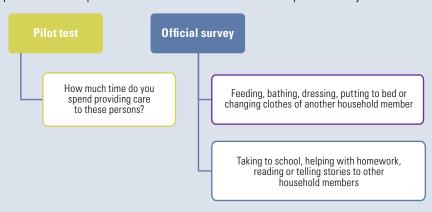
In order to prepare a minimum activities list, it was necessary to define the level of aggregation of the activities that would make it possible to achieve the measurement objectives and underpin the quality of the estimations. Having a more aggregated activities list allows for greater exhaustiveness by synthesizing one or more major divisions in an activity. This can be useful when dealing with activities that are not very prevalent, since the aim is to have as few activities as possible to define the minimum list. In addition, for activities that have low participation rates, disaggregating them does not necessarily guarantee that work time is captured more effectively. However, the risks of this strategy, especially when dealing with activities that are more prevalent, are measurement errors which can affect the reliability and validity of the data (see box V.1). In contrast, the strategy of using disaggregated activities at a lower hierarchical level in the classifier makes it possible to obtain greater clarity in the interviewee response process, which results in more valid responses. Nonetheless, by omitting more specific tasks, the data capture is less exhaustive; and the number of activities in the minimum list is increased.

Box V.1

Evaluation of the activities disaggregation strategy: the case of the Microenterprise Survey (EME) in Chile

To evaluate how the level of hierarchical disaggregation of the activities affects the measurement of time, the sixth Microenterprise Survey (EME) (2019) of the National Institute of Statistics (INE) of Chile was analysed.^a In its latest version, a brief module was incorporated to measure the time spent on unpaid work, where two levels of activity disaggregation were used in the data collection process. Firstly, the pilot test included an aggregate question that seeks to capture the time dedicated to care work. Secondly, in the official survey it was decided to replace this question with two groups of activities that inquire about the time spent on specific tasks. Diagram shows the wording of the questions used in both cases.

Chile: wording of questions on unpaid care work in the sixth Microenterprise Survey (EME)



Source: Pilot test and official conducting of the VI Microenterprise Survey (EME), National Institute of Statistics (INE) of Chile.

The comparison between the two measurements should be used only as a reference, for several reasons:

- (i) They were not designed to be compared.
- (ii) They used different reference periods: whereas the pilot test collected data on two typical days, Monday-Friday and Saturday-Sunday, the official survey collected data on the last day of the activity. Therefore, for comparison, the pilot data were weighted by a typical day to fine-tune the information; however, the official survey does not have information on the day reported, so it could not be adjusted.
- (iii) The size of the sample of persons in the pilot test who respond on time spent on care is no more than 40, so its estimation does not have the necessary quality. Moreover, at the design level, it only considers two regions of the country, so the results could be biased in some way. Nonetheless, to improve comparability, the data from the official survey are used at the sample level, since there is no weighting in the pilot test.

Box V.1 (concluded)

The results obtained on the time spent in care work (see the figure), show that there is a difference of more than six hours between the pilot test and the official survey. This discrepancy has many causes, one being the way in which the question on these activities is worded. The pilot includes both active and passive care tasks, which will vary according to what each person understands by "care". The official survey, in which the measurement is less exhaustive, lists four or five specific caregiving tasks, which, although they may also vary in terms of what they include or exclude (either because of: (i) retention of the activities asked about; (ii) different understanding of what each task means; or (iii) having performed some or all of the care activities), the variation in understanding of the activity will be less than that in the pilot test, in which care activities are aggregated.

Chile: participation and time spent on unpaid care work in the Sixth Microenterprise Survey (EME) (Hours and percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of microdata from the pilot survey and the official conducting of the VI Microenterprise Survey (EME), National Institute of Statistics (INE) of Chile.

The difference in the data obtained between the pilot test and the official survey shows how the measurement can be affected by the hierarchies used, and the risk that this would imply, because including activities that are too aggregated could result in an imprecise measurement of the phenomenon.

The foregoing example shows that the use of a list of activities with greater disaggregation, that is, the inclusion of several tasks in order to avoid the use of vague or technical concepts that may confuse the person being interviewed, improves data capture. It also combines several similar tasks into a single activity, thereby making the list shorter. Moreover, it improves comprehension and recall, since this type of wording provides hints about the tasks to thought about in order to answer the question. The levels of disaggregation to be published should also be taken into account, since the number of activities at a specific level will also affect the result obtained.

Source: Pilot test and official survey of the Sixth Microenterprise Survey (EME), National Statistics Institute (INE) of Chile.

The minimum set of time-use activities for Latin America and the Caribbean (see table V.1) is an instrument designed on the basis of CAUTAL, which responds to the need of Latin American and Caribbean countries for an instrument appropriate to the regional context.

^a These codes of the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) refer to the care of household members from 0 to 14 years of age.

Table V.1
Minimum set of time-use activities for Latin America and the Caribbean (CMAUTALC)

CAUTAL	Activity	Number
Major division 1	Employment and related activities	1
Major division 2	Own-use goods production	2
Divisions 52 and 53	Unpaid work for the community and volunteering	3
Division 31	Food preparation and serving for own household	4
Division 32	Cleaning of the home	5
Division 34	Maintenance and minor repairs for own household	6
Division 33	Cleaning and care of clothing and footwear for own household	7
Division 35	Household management	8
Division 37	Pet and plant care	9
Division 36	Shopping for the household	10
Group 511	Unpaid domestic tasks for other households	11
Group 411 and 441	Caregiving and support for household members aged 0–14	12
Group 412 and 442 Subgroups 4142 and 4431	Temporary health care for household members aged 0–14	13
Group 413 Subgroups 4141 and 4430	School or learning support for household members aged 0–14	14
Groups 421, 431 and 441 Subgroups 4430	Caregiving and support for adult household members	15
Groups 422, 432 and 442 Subgroups 4231, 4331 and 4431	Health care for adult household members	16
Groups 420, 430 Subgroups 4230, 4332 and 4430	Support activities for adult household members with legal, administrative and financial errands	17
Group 512	Unpaid care of people from other households	18
Major division 6	Learning and study	19
Group 711	Socializing with family, friends and others	20
Group 712	Attending community, civic or religious celebrations	21
Division 72	Attendance at cultural, entertainment and sports events	22
Division 73	Arts and hobbies	23
Division 74	Sport and physical exercise	24
Division 81	Reading for leisure	25
Divisions 82, 83 and 84	Watching television or videos, or listening to the radio or other audio media	26
Group 922	Sleeping	27
Group 921	Eating and drinking	28
Division 91	Self-care	29
Divisions 14 and 62	Commuting to and from work and travel for study activities (all other travel is included in the activity)	30
	Other activities	31

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Note: The Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) is divided into three sections (identified by letters), nine major divisions (one digit), 34 divisions (two digits), 96 groups (three digits) and 23 subgroups (four digits). See [online] https://repositorio.cepal.org/bitstream/handle/11362/40170/1/S1600307_en.pdf.

The 31 activities that comprise the minimum set cover the following categories: Employment and own-use goods production work; unpaid domestic work; unpaid care work; unpaid work for other households, for the community and volunteering; and personal activities. While this instrument is intended as a guideline for the collection of time-use data in the most concise way possible, it attempts to capture human activities comprehensively as a whole.

The minimum list can be used in any instrument or mode of time-use data collection. Its implementation allows for the construction of indicators for reporting under international and regional agreements (such as indicator 5.4.1 for monitoring the Sustainable Development Goals and total work time); it contributes to the monitoring of national public policies to valorize, reduce and redistribute domestic and care work; and it favours regional comparability at the level of the activities established, regardless of the number of questions it is decided to ask in each country (provided the 31 activities are captured in a differentiated manner).

The establishment of minimum standards does not require countries with surveys that are more developed in terms of the disaggregation of activities to reduce the complexity of the instruments they currently use. The objective of the list is to make it possible to generate regionally comparable indicators for the 31 activities chosen as the minimum required for time-use measurements. The guidelines are therefore useful for countries that have not yet reached this level of disaggregation and wish to do so in order to move towards more exhaustive surveys. The minimum list thus represents an important step towards the harmonization of time-use surveys in the region, and a significant boost to the progressive consolidation of these instruments.

D. Standard time use questionnaire and important considerations for its use

This section presents a proposal for adapting the activities of the minimum list in the form of questions to prepare a standard time-use questionnaire and subsequently include it in a regular survey. In line with the list, the proposed module aims to respond to the need for an instrument that is appropriate to the regional context. It is a dynamic and flexible tool that can be used as a module in household, employment or multipurpose surveys, or else as part of a specialized time use survey.

When implementing the questionnaire proposed below, it should be borne in mind that, in order to achieve relevant cross-referencing of data, the survey of which it forms part should contain the following information: (i) geographic location; (ii) household characteristics; (iii) sociodemographic characteristics of the individuals; and (iv) occupational status.

In the case of a stand-alone time-use survey based on the minimum list, questions on time spent in paid work activities should be asked after the questions that make it possible to define the labour force and individuals engaged in own-use production activities (see section B).

Notwithstanding the wording of the questionnaire suggested in this section, it is recommended that the questions be adapted according to each country's cultural and linguistic specifics. Cognitive testing is also suggested, as linguistic and cultural differences may influence the adaptations.

The questionnaire includes 38 questions (34 essential and 4 optional) divided into eight sections (see table V.2). Section D, which corresponds to unpaid care work, is subdivided into: care of household members who have a disability or are permanently dependent (optional); care of children and adolescents in the household (according to each country's concept of childhood), care of household members or family members not included in the childhood group. The optional nature of the first subsection does not imply the non-collection of information on work caring for persons who have a disability or are permanently dependent; instead, it gives countries that wish to open this subsection the possibility of doing so in a differentiated manner. Otherwise, care activities for persons who have a disability or are permanently dependent will be subsumed under general care in the appropriate age ranges.

Table V.2
Sections of the proposed standard time use module

Section	Activity of the Minimum Set of Time-Use Activities for Latin America and the Caribbean	Codes of the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL)	Subsection	Priority	Number of questions
A: Self-care, physiological and study activities	19, 27, 28, 29 and part of 30	Major division 6, Group 922, Group 921, Division 91		Essential	5
B: Employment, related activities and own-use goods production	1, 2 and part of 30	Major divisions 1 and 2		Essential	5
C: Unpaid domestic work	4, 5, 6, 7, 8, 9 and 10	Divisions 31, 32, 33, 34, 35, 36 and 37		Essential	7
D: Unpaid care work	12, 13, 14,	Groups 411, 412, 413 y 414 ^a , 441, 442 ^{bc} and 511 Subgroups 4141, 4142 ^{bc} , 4430 and 4431 ^{bc}	Childcare for children between 0 and X years old	Essential	3
	15, 16, and 17	Groups 420, 421 and 422 ^b , 430, 431, 432 ^c , 441, 442 ^{bc} y 511 Subgroups 4230, 4231 ^{ab} , 4331, 4332 ^b 4430 y 4431 ^d	Care of household members over X years of age	Essential	3
	12, 13, 14, 15, 16 and 17	Groups 441 and 442 Subgroup 4430 and 4431	Care of household members with disabilities or those who are permanently dependent	Optional	3
E: Unpaid domestic and care work for family members	11	Group 511	Unpaid domestic work for family members living in other households	Essential	1
living in other households	18	Group 512	Unpaid care of children (between 0 and X years of age), family members living in other households	Essential	1
	18	Group 512	Unpaid care of family members over X years of age living in other households	Essential	1
F: Work for the community and volunteering	3	Divisions 52 and 53		Essential	1
G: Social and recreational activities	20, 21, 22, 23, 24, 25 and 26	Divisions 72, 73, 74, 81, 82, 83 and 84 Group 711, 712		Essential	7
H: Other activities	31			Optional	1

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

The decision to make this subsection optional responds to the methodological complexities of collecting data on persons who have a disability or are permanently dependent. These range from the identification of this type of population to issues related to the sample designs needed to capture it. Nonetheless, in countries where it is possible to implement an instrument that can detect the population with disabilities, it is suggested that the additional module be included.

Countries that decide to collect separate data on care for these persons need to adjust the survey sample design and include a set of questions to identify households that have members in this population group. Based on this characterization, the subsection is activated only when the household includes persons with disabilities or who are permanently dependent. To prevent double counting, it is advisable to make this be the first care subsection.

This document does not address the details of the methodological issues involved in capturing this population or its complexities. Moreover, as each national statistical office has specific parameters for identification, no questions will be proposed for this purpose either.

a These codes from the Classification of Time Use Activities for Latin America and the Caribbean (CAUTAL) refer to the care of household members aged 0 to 14.

^b Codes referring to household members aged 15 to 59 years.

^c Codes referring to the care of household members aged 60 years and over.

^d Groups and subgroups referring to the care of household members with disabilities or who are permanently dependent (all ages).

In general, it is advisable to include the 31 activities proposed in the regional minimum list. If there are limitations on the number of questions but it is desired to maintain the possibility of calculating SDG monitoring indicator 5.4.1 (proportion of time spent on unpaid care and domestic work), at least sections C, D and E would need to be included.

Important considerations for using the standard time-use module question proposal

a) Target population and characteristics of the respondent

When designing a survey, the national statistical office must choose the minimum age and the characteristics of the population to be studied. This decision depends on each country's sociocultural standards and characteristics and the objective of the survey itself. As the instrument needs to be consistent with the decisions made on measuring the labour force, it is suggested that this questionnaire be applied to all persons to whom a labour force module would be applied. According to CAUTAL, these should be persons 15 years of age and older; however, the module proposed here leaves the target population to be defined by each NSO, 4 as shown in the example below:

For all persons N+ years of age (the age of the persons under study must be defined in each country).

b) Reference period

To capture the time spent on the activities to be analysed, the reference period to be used in the survey needs to be established. This can be a week or a day. If it is a day, it is possible to ask for yesterday, for a working day and a non-working day, or for a weekday and a weekend day. Although in the standard module it was decided not to specify a type of reference period (day or week), it is possible to adapt this to the period that the country considers most appropriate. Table V.3 gives an example of both possibilities, day and week.

Table V.3
Examples of reference periods in time-use surveys

How much time did you spend doing this activity yesterday? [] hours and [] minutes		If the reference period is one day
How much time did you spend doing this activity last week? Hours and minutes		If the reference period is one week
Monday to Friday	[] and []	
Saturday and Sunday	[] and []	

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

For each question on the time devoted to a given activity, both hours and minutes need to be included.

c) Travel

As recommended by CAUTAL, it was decided to include information on travel and waiting time in all applicable activities. The exceptions are commuting to and from work and travel related to study activities.

The collection of data on travel and waiting times deserves special attention, since special cases can often arise. Since the present proposal seeks to establish a minimum scenario, information on travel and waiting time will not be asked for separately, but it is advisable to include it in each activity. However, in countries where it is desired to capture transfers in a differentiated manner, criteria should be used that allow for comparison at the level of the 31 activities.

Comparability will be maintained in the universe of observations of persons aged 15 years or older even if a country chooses to collect data on individuals who are younger than this.

d) Unpaid work

This is where the greatest complexity arises in terms of international comparability, owing to the lack of consensus on the concept of family for statistical purposes and the fact that family dynamics differ between countries. In Latin America and the Caribbean, unpaid domestic and care work performed for other households is usually considered as work for the family (adults performing domestic chores in the homes of the elderly, grandmothers caring for grandchildren from another household, among other examples).

In the United Nations proposal, it was decided to group together the production of unpaid services for household members or relatives living in other households. However, the alternative evaluated and agreed upon in the region involved the independent measurement of work for relatives living in other households, to which should be added domestic and care work performed for own household in order to comply with the requirements of the SDG report. These questions relate to CAUTAL division 51 and are found in section E. Care and domestic activities performed for non-family members and members of other household also fall under division 51, but the corresponding questions are found in section F.

(i) Unpaid care work

The section on unpaid care work is divided according to three categories of care recipients:

Boys and girls (from 0 to X years old)

Household members or family members over X years of age

Persons who have a disability or are permanently dependent | Optional

The definition of each of these population groups should respect the criteria applied in each country, in order to ensure comparability with the country's other measurements. However, in order to move towards greater regional harmonization, it is advisable to use the age ranges proposed by CAUTAL, which uses the range of 0 to 14 for the first group (children and adolescents). In the case of the group of household members or family members over X years of age, it is advisable to align this with the legal working age of each country, in order to have indicators of total work time that encompass the same populations for paid and unpaid work (CAUTAL suggests 15 years of age and over). Lastly, as already noted, the group of persons who have disability or are permanently dependent will be defined on the basis of national standards; and they will be characterized through a battery of questions placed before the time-use module.

(ii) Passive care

If the country decides to include passive care in the questions on care work, it is necessary to specifically exclude time spent supervising other household members while simultaneously performing other activities, as shown in the following example:

Please exclude time spent caring for children while performing other activities already reported.

Standard time-use questionnaire for Latin America 2. and the Caribbean

This section presents the wording of questions in the time-use module format. Notes are included for each question indicating the related CAUTAL division and observations as relevant. The legends used to enhance understanding of the instrument are explained below:

- Words in *italics* and colour are intended to help (the interviewer should not necessarily read them aloud).
- Grey-shaded questions are optional, so each country can decide whether to include them or not.
- Phrases in turquoise and green refer to care for persons with disability or those who are permanently dependent. It is advisable to include the turquoise phrases but exclude the green ones if the country decides not to collect this information separately (questions D.7 to D.9).⁵

As described above, the inclusion of a section to measure care for persons that have a disability or are dependent also requires a battery of questions to identify the individuals in question in the households.

- Text highlighted in yellow refers to passive care. It is advisable to include this text if the country decides to collect information on passive care.
- Text in red indicates the question to be asked, according to the respondent's previous answer.

Table V.4

Standard time-use questionnaire for Latin America and the Caribbean

Section A: self-care, physiological and study activities

For all persons of N+ years of age (the respondents' age must be defined in each country)				
I'm now going to ask you about the time you spent on self-care, physiological and study activities				
	Notes			
A1. How long did you spend sleeping in the reference period? Include naps [] hours and [] minutes	Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) 922			
	Adapt the question to the chosen reference period.			
A2. How much time did you spend eating and drinking (breakfast, lunch, dinner, snacks)	CAUTAL 921			
in the reference period? [] hours and [] minutes	Adapt the question to the chosen reference period.			
A3. How much time did you spend on personal hygiene (showering, dressing, cutting or co	mbing CAUTAL 911			
your hair) or personal health care (convalescing from an illness, visiting the doctor) in 1 reference period?	Adapt the question to the chosen reference period.			
[] hours and [] minutes				
A4.a Did you attend classes or participate in a course (either face-to-face or online) or work	CAUTAL 61			
on academic assignments, research or other study activities in the reference period?	Adapt question A4.b to the chosen reference period.			
1.Yes→A4.b				
2. No→B1.a				
A4.b How much time did you spend doing this?				
[] hours and [] minutes				
A5.a Did you commute to and from school/college, high school or university in the reference	e period? CAUTAL 62			
1.Yes→A5.b	Adapt question A5.b to the chosen reference period.			
2. No→B1.a				
A5.b How much time did you spend doing this? [] hours and [] minutes				

Section B: employment, related activities and own-use goods production

For all persons of N+ years of age (the respondents' age must be defined in each country)				
Now I'm going to ask you about the time you spent in employment and related activities				
	Notes			
B1.a Did you do any type of work for which you received a payment or benefits in the reference period? 1. Yes→B1.b 2. No→B3.a	CAUTAL 1 Adapt question B1.b to the chosen reference period.			
B1.b How much time did you spend doing this? [] hours and [] minutes				
B2.a Did you commute to and from this job in the reference period? 1. Yes→B2.b 2. No→B3.a	CAUTAL 1 Adapt question B2.b to the chosen reference period.			
B2.b How much time did you spend doing this? [] hours and [] minutes				
B3.a Did you engage in job search or start a business in the reference period? 1. Yes→B3.b 2. No→B4.a	CAUTAL 1 Adapt question B3.b to the selected reference period.			
B3.b Including travel and waiting time, how much time did you spend doing this? [] hours and [] minutes				
 B4.a Did you participate in internships, apprenticeships or other unpaid traineeships in the reference period? 1.Yes→B4.b 2. No→B5.a 	CAUTAL 1 Adapt question B4.b to the chosen reference period.			
B4.b Including travel and waiting time, how much time did you spend doing this? [] hours and [] minutes				

Section B (concluded)

Now I'm going to ask you about the time you spent producing goods to be consumed by your household exclusively			
 B5.a Did you grow food crops, raise or care for animals or fish, make canned food, textiles, or work in construction for your household in the reference period? 1. Yes→B5.b 2. No→C1.a 	CAUTAL 2 Adapt question B2.b to the chosen reference period.		
B5.b Including travel and waiting time, how much time did you spend doing this? [] hours and [] minutes			

Section C: unpaid domestic work

	I'm going to ask you about the time you spent on domestic work activities done for your hou	
10	Did you cook or heat the food, set or clear the table or wash the dishes in your household	Notes CAUTAL 31
ıa	in the reference period?	Adapt question C1.b to the chosen reference period.
	1. Yes→C1.b	Adapt question or b to the chosen reference period
	2. No→C2.a	
1.b	How much time did you spend doing this?	
	[] hours and [] minutes	
2.a	Did you wash, dry-clean, iron, iron, put away clothes, take or pick up dry-cleaning or laundry, or clean shoes in the reference period?	CAUTAL33 Adapt question C2.b to the chosen reference period.
	1. Yes→C2.b	,
	2. No→C3.a	
2.b	Including travel and waiting times, how much time did you spend doing this? Please exclude machine laundry times when you were engaged in other activities.	
	[] hours and [] minutes	
3.a	Did you clean the inside and outside of your home, throw away, separate or recycle garbage in the reference period?	CAUTAL32 Adapt question C3.b to the chosen reference period.
	1. Yes→C3.b	
0 1	2. No→C4.a	
3.b	How much time did you spend doing this? Please include travel and waiting times if applicable for recycling of garbage. [] hours and [] minutes	
4.a	Did you take care of the garden, plants, or a family pet (feeding, bathing, walking, or cleaning	CAUTAL 37
	up after them), use pet services, or take them to veterinarians in the reference period?	Adapt question C4.b to the chosen reference period.
	1. Yes→C4.b	
	2. No→C5.a	
4.b	Including travel and waiting times, how much time did you spend doing this?	
г.	[] hours and [] minutes	CALITALOA
s.a	Did you do any electrical repairs, plumbing activities, minor masonry work, or wash or make any repairs to a vehicle belonging to this household in the reference period?	CAUTAL34 Adapt question C5.b to the chosen reference period.
	1. Yes→C5.b	Adapt question 63.b to the chosen reference period.
	2. No→C6.a	
5.b	Including travel and waiting times, how much time did you spend doing this?	
	[] hours and [] minutes	
6.a	Did you budget, organize or plan household-related activities; pay household bills (utilities, mortgages, loans, rent) or carry out administrative or legal formalities for the household or any of its members (passports, contract or cancellation of services, collection of benefits from social programmes) in the reference period? Include activities carried out online or through the Internet.	CAUTAL35 Adapt question C6.b to the chosen reference period
	1. Yes→C6.b	
	2. No→C7.a	
6.b	Including travel and waiting times, how much time did you spend doing this? [] hours and [] minutes	
7.a	Did you purchase food, cleaning supplies, clothing or footwear, vehicles or real estate for members of this household in the reference period? Include activities performed online. 1. Yes→C7.b 2. No→D1.a or D4.a	CAUTAL36 Adapt question C7.b to the chosen reference period.
7 h	Including travel and waiting time, how much time did you spend doing this?	
, .U	hours and hintes	

Section D: unpaid care work
Optional: care for household members with disabilities or who are permanently dependent

For all persons of N+ years of age with household members with a disability or who are permanently dependent (each country must define the age of the respondents)				
Now I'm going to ask you about the time you spent caring for household members who have a disability or are permanently dependent, for which you do not receive payment				
For all persons of N+ years of age with household members with a disability or permanently dependent (each country must define the age of the respondents) ${\sf N}$	Notes			
 D1.a Did you feed, bathe, change diapers, dress, put to bed, talk to, or provide care to a person in your household who has a disability or is permanently dependent in the reference period? 1. Yes→D1.b 2. No→D2.a 	CAUTAL 441 Adapt question D1.b to the selected reference period.			
D1.b How much time did you spend doing this? Exclude time spent caring for persons who have a disability or are permanently dependent while engaged in other activities already reported. [] hours and [] minutes				
D2.a Did you provide medical care or arrange for medical care services to a person with a permanent disability or someone who is permanently dependent in your home (giving medication, taking their temperature, applying bandages, assisting with physical therapy, or taking them to medical appointments) in the reference period? 1. Yes→D2.b 2. No→D3.a	CAUTAL442 , 4431 Adapt question D2.b to the selected reference period.			
D2.b Including travel and waiting time, how much time did you spend doing this? Please exclude time spent caring for persons who have a disability or are permanently dependent while performing other activities already reported. [] hours and [] minutes				
 D3.a Did you assist a person with a disability or permanently dependent in your household with forms, administration or payment of bills (online or face-to-face) in the reference period? 1. Yes→D3.b 2. No→D4.a 	CAUTAL 441 and 4430 Adapt question D3.b to the selected reference period.			
D3.b Including travel and waiting times, how much time did you spend doing this? Please exclude time spent caring for persons who have a disability or are permanently dependent while performing other activities already reported. [] hours and [] minutes				

Unpaid child care

Now I'm going to ask you about the time you spent caring for children aged 0 to X (country d you do not receive payment. Do not include care for children who have a disability or are pei	efinition of childhood) in your household for which manently dependent
	Notes
04.a Did you feed, bathe, change diapers, dress, put to bed, talk to, mind or play with a child (0 and X years) in your household in the reference period? 1. Yes→04.b	CAUTAL 411 and 441 Adapt question D4.b to the selected reference period.
2. No→D5.a	
D4.b How much time did you spend doing this? Please exclude time spent caring for children (0 and X years) while also doing other activities already reported.	
[] hours and [] minutes	
 D5.a Did you help the children (0 and X years) of the household with homework or participate in meetings at school, day care or other education services in the reference period? 1. Yes→D5.b 	CAUTAL 413, 4141, 4430 Adapt question D5.b to the selected reference period.
2. No→D6.a	
D5.b Including travel and waiting time, how much time did you spend doing this? Please exclude a spent caring for children (0 and X years) while also doing other activities already reported. [] hours and [] minutes 	ime
06.a Did you provide medical care to the children (0 and X years) of the household (giving medicataking their temperature, applying bandages, assisting with physiotherapy or taking them to medical appointments) in the reference period? 1. Yes→D3.b	tion, CAUTAL 412, 442 and 4431 Adapt question D6.b to the selected reference period.
2. No→D4.a	
	
D6.b Including travel and waiting time, how much time did you spend doing this? Please exclude 1 spent caring for children (0 and X years) while also doing other activities already reported. [] hours and [] minutes	ime

Unpaid care of persons over X years of age

For all persons of N+ years of age (each country must define the age of the respondents)				
Now I'm going to ask you about the time you spent in activities caring for household members over X years of age for which you do not receive payment. Do not include care for persons who have a disability or are permanently dependent				
	Notes			
D7.a Did you feed, bathe, change diapers, dress, put to bed, talk to, or mind a person over X years old in your household in the reference period? 1. Yes→D4.b 2. No→D5.a	CAUTAL 421, 431, 4330 and 441 Adapt question D7.b to the chosen reference period.			
D7.b Including transfer and waiting times, how much time did you spend doing this? Please exclude time spent caring for people over X years of age while also doing other activities already reported. [] hours and [] minutes				
 D8.a Did you provide medical care or arrange medical care services for a person over X years of age in your household (giving medication, taking their temperature, applying bandages, assisting with physical therapy, or taking them to medical appointments) in the reference period? 1. Yes→D5.b 2. No→D6.a 	CAUTAL 422, 432, 442 4331 and 4431 Adapt question D8.b to the selected reference period.			
D8.b Including travel and waiting time, how much time did you spend doing this? Please exclude time spent caring for people over X years of age while also doing other activities already reported. [] hours and [] minutes				
 D9.a Did you help any member of your household older than X years old with forms, administrative processes or payment of bills (whether online or in person) in the reference period? 1. Yes→D6.b 2. No→E1.a 	CAUTAL 420, 4332, 430, 4430 Adapt question D9.b to the chosen reference period.			
D9.b Including travel and waiting time, how much time did you spend doing this? Please exclude time spent caring for persons aged Y and older while engaged in other activities already reported. [] hours and [] minutes				

Section E: unpaid domestic and care work for family members living in other households

For all persons of N+ years of age (each country must define the age of the respondents)				
Now I'm going to ask you about the time you spent on domestic and care tasks for family members who do not live in your household and for which you are not paid				
	Notes			
E1.a Did you do any domestic work for family members not living in this household without payment in the reference period? 1. Yes→E1.b 2. No→E2.a	CAUTAL 511 Adapt question E1.b to the chosen reference period.			
E1.b Including travel and waiting time, how much time did you spend doing this? [] hours and [] minutes				
E2.a Did you provide care of any type to children of the family who do not live in this household, without payment in the reference period? 1. Yes→E2.b 2. No→E3.a	CAUTAL 512 Adapt question E3.b to the chosen reference period.			
E2.b Including travel and waiting time, how much time did you spend doing this? Please exclude time spent caring for these children while also doing other activities already reported. [] hours and [] minutes				
E3.a Did you provide any type of care for persons over X years old who are members of the family but do not live in this household in the reference period? 1. Yes→E3.b 2. No→F1.a	CAUTAL 512 Adapt question E4.b to the chosen reference period.			
E3.b Including travel and waiting time, how much time did you spend doing this? Please exclude time spent caring for these persons aged Y and older while also doing other activities already reported. [] hours and [] minutes				

Section F: volunteer and community work

For all persons of N+ years of age (each country must define the age of the respondents) Now I'm going to ask you about the time you spent volunteering or in community work activities for which you are not paid			
		Notes	
F1a	Did you do any domestic or care activities for neighbours or friends without payment; or did you volunteer for the community or organizations in the reference period? 1. Yes→F1.b 2. No→G1.a	CAUTAL 52 and 53 Adapt question F1.b to the selected reference period.	
F1.b	Including travel and waiting times, how much time did you spend doing this? [] hours and [] minutes		

Section G: social and recreational activities

For all persons of N+ years of age (each country must define the age of the respondents)					
Now I'm going to ask you about the time you spent in recreational or social activities					
	Notes				
G1.a Did you practice any sport or exercise in the reference period? 1. Yes→G1.b 2. No→G2.a C1.b Reduding travel and waiting times how much time did you people doing this?	CAUTAL 74 Adapt question G1.b to the chosen reference period.				
G1.b Including travel and waiting times, how much time did you spend doing this? [] hours and [] minutes					
G2.a Did you engage in artistic activities, (painting, music, theatre, dance, photography); or did you engage in a hobby or games (include virtual games) in the reference period? Yes→G2.b No→G3.a 	CAUTAL 73 Adapt question G2.b to the chosen reference period.				
G2.b Including travel and waiting time, how much time did you spend on these activities? Please exclude time spent on these activities while performing other activities already reported. [] hours and [] minutes					
G3.a Did you attend a cultural, entertainment or sporting event in the reference period? 1. Yes→G3.b 2. No→G4.a	CAUTAL 72 Adapt question G3.b to the chosen reference period.				
G3.b Including travel and waiting times, how much time did you spend doing this? [] hours and [] minutes					
 G4.a Did you attend community festivities or events, attend civil obligations or participate in religious celebrations or practices in the reference period? 1. Yes→G4.b 2. No→G5.a 	CAUTAL 712 Adapt question G4.b to the chosen reference period.				
G4.b Including travel and waiting time, how much time did you spend on these activities? Please exclude the time you spent on these activities while also doing other activities already reported [] hours and [] minutes.					
G5.a Did you meet with others for social purposes (online or face-to-face), chat, write or read a social letter or personal email in the reference period? 1. Yes→G5.b 2. No→G6.a	CAUTAL 711 Adapt question G5.b to the chosen reference period.				
G5.b Including travel and waiting time, how much time did you spend on these activities? Please exclude time spent on these activities while also doing other activities already reported. [] hours and [] minutes					
G6.a Did you read for leisure in physical or virtual formats (newspapers, books, e-books, social networks, magazines) in the reference period? 1. Yes→G6.b 2. No→G7.a	CAUTAL 81 Adapt question G6.b to the chosen reference period.				
G6.b Including travel and waiting time, how much time did you spend on these activities? Please exclude time spent on these activities while also doing other activities already reported. [] hours and [] minutes					
G7.a Did you watch television, listen to radio or other media (include YouTube, live on the internet or other platforms) in the reference period? 1. Yes→G7.b 2. No→End of questionnaire or H1.a	CAUTAL 82, 83 and 84 Adapt question G7.b to the chosen reference period.				
G7.b Including travel and waiting time, how much time did you spend on these activities? Please exclude time spent on these activities while also doing other activities already reported. [] hours and [] minutes					
1 1					

Section H: other activities

For all persons of N+ years of age (each country must define the age of the respondents)				
Now I'm going to ask you about the time you spent on other activities				
	Notes			
H1.a Did you perform any other activity that I have not asked you about in the reference period? 1.Yes → Specify activity →H1.b 2. No→ End of questionnaire	Adapt question H1.b to the chosen reference period.			
H1.b Including travel and waiting time, how much time did you spend doing this? [] hours and [] minutes End of questionnaire				

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Annex V.A1

Table V.A1.1

Relationship between the proposed minimum harmonized instrument of the Statistical Commission of the United Nations and the proposed minimum harmonized list of time-use activities for Latin America and the Caribbean

Minimun	n harmonized instrument of the Unit	ted Nations Statistical Commission		d minimum list of time use activities nerica and the Caribbean	
Number	Activity	International Classification of Activities for Time-Use Statistics (ICATUS) 2016	Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL)	Activity	Number
1	Working in paid job or income generating activities	Major division 1	Major division 1	Employment and related activities	1
2	Making goods for own household or family use	Major division 2	Major division 2	Own-use goods production	2
3	Volunteer work	Divisions 51 and 52	Divisions 52 and 53	Unpaid work for the community and volunteer work	3
4	Preparing and serving food and meals for own household or family members	Division 31	Division 31	Food preparation and serving for household members	4
5	Cleaning own or family dwelling	Division 32	Division 32	Cleaning of the home	5
6	Maintaining and making small repairs in own or family dwelling	Division 33	Division 34	Maintenance and minor repairs for own household	6
7	Cleaning and care of clothing and footwear of own household or family members	Division 34	Division 33	Cleaning and care of clothes and footwear	7
8	Managing own household	Division 35	Division 35	Household management	8
9	Taking care of pet of own household or family	Division 36	Division 37	Pets and plants care	9
10	Shopping for own household or family	Division 37	Division 36	Shopping for the household	10
			Group 511	Unpaid domestic tasks for other households	11
11	Taking care of own (household or family) child (use country definition of child)) Division 41	Division 41	Group 411 and 441	Caregiving and support for household members aged 0 to 14	12
			Group 412 and 442 Subgroup 4142 and 4431	Temporary health care for household members aged 0 to 14	13
			Group 413 Subgroup 4141	School or learning support for household members aged 0 to 14	14
12	Taking care of or helping adults (own household or family) (use country definition of adult)	Divisions 42 and 43	Groups 421, 431 and 441	Caregiving and support of adult household members	15
			Groups 422, 432 and 442 Subgroup 4331 and 4431	Temporary health care for adult household members	16
			Groups 420, Subgroup 4430 and 4332	Supporting adult household members with legal, administrative and administrative formalities and financial	17
			Group 511	Unpaid domestic tasks for other households	18
13	Education	Major division 6	Major division 6	Learning and study	19
14	Socializing and communication	Division 71	Group 711	Socializing with family, friends or others	20
15	Community participation, civic and related responsibilities and religious practices	Divisions 72, 73 and 74	Group 712	Attending community, civic or religious celebrations	21
16	Cultural, entertainment and sports events	Division 81	Division 72	Attendance at cultural, entertainment and sports events	22
17	Hobbies, games and other pastime activities	Division 82	Division 73	Art and hobbies	23
18	Sports participation and exercise	Division 83	Division 74	Sport and physical exercise	24
19	Reading for leisure	Group 841	Division 81	Reading for leisure	25

Table V.A1.1 (concluded)

Minimum harmonized instrument of the United Nations Statistical Commission		Proposed harmonized minimum list of time use activities for Latin America and the Caribbean			
Number	Activity	International Classification of Activities for Time-Use Statistics (ICATUS) 2016	Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL)	Activity	Number
20	Watching television or listening to radio streaming	Group 842 and 843	Divisions 82,83 and 84	Watching television or videos, or listening to radio or other audio media	26
21	Sleep	Division 91	Group 922	Sleeping	27
22	Eating and drinking	Division 92	Group 921	Eating and drinking	28
23	Personal hygiene and care	Divisions 93 and 94	Division 91	Self-care	29
24	Travel		Divisions 14 and 62	Commuting to and from work and travel for study activities (other travel is included in the activity)	30
25	Other activities			Other activities	31

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Chapter VI

Time-use data for public policy: experiences and challenges

This chapter aims to outline the latest advances made in the deployment of data on time use and unpaid domestic and care work, to support public policies for gender equality in the region, especially those aimed at promoting the co-responsibility of the State, businesses and families in this type of work.¹

The direct statistical data provided by time-use surveys, as well as the statistics derived from them, have given rise to estimations that are useful for other analytical tools. These include the satellite accounts of unpaid work done in households —through which the value of unpaid work is estimated in relation to gross domestic product (GDP)—and satellite accounts of the health sector. These have been used to estimate the value of unpaid work providing health care, which is shifted on to households, and particularly on to women.

Time-use surveys also have potential for wider use in domains such as the environment, mobility and even the possibility of incorporating estimations derived from this source to measure multidimensional poverty, to cite a few examples. Accordingly, the chapter describes examples of policies and actions implemented by countries that have exploited time-use data; and it references other aspects of daily life covered by time-use surveys, which are useful for illustrating a number of public policy challenges.

The most common of these challenges stems from the fact that the continuity of time-use surveys is not assured in several of the region's countries, either because there is no legislation mandating them, or because they are not included in the regular planning of the national statistical offices. This means that a budget appropriation has to be negotiated before each edition. Nonetheless, the fact that some countries have already legislated in this area can serve as an example to others.

It is essential to have empirical data to support public policies; and data on time use and unpaid work demonstrate the need not only for public policies that promote equality between women and men, but also for continued discussion on the scope of such policies in the region.

Lastly, the chapter describes a number of practices and experiences of selected countries in the region in terms of inter-agency collaboration to generate timely and relevant data and information in the public domain.

A. Information needs for public policies

The State, society and individuals require reliable and useful statistics and information as an input for decision-making in the private sector, and also for the participation of the population at large in the formulation of public policies. The information for this purpose needs to be of high quality, timely, accessible and relevant; in other words, it must be of value to institutions and individuals.

This chapter was prepared on the basis of an online search of documents on public policies related to different aspects of time use and unpaid work. In addition, with support from the Commission for Latin America and the Caribbean (ECLAC), the National Women's Institute (INMUJERES) of Mexico asked the national statistical offices (NSOs) and the machineries for the advancement of women that form part of the ECLAC Working Group on Gender Statistics, to provide information on good practices in the use of information on the subject, in the different phases of the corresponding public policies: diagnostic assessment, design and formulation, budgeting, implementation and evaluation.

Time-use statistics and indicators provide governments with invaluable inputs for the design of public policies based on an accurate diagnosis, so that the decisions made and actions taken address real problems in known environments. They also make it possible to monitor the progress of public policies on gender equality, in order to facilitate their evaluation and alter their course, if appropriate. This aspect of official statistics is fundamental in a democracy, since data can expose deficiencies in government action and lead to changes. The decision to design, monitor and evaluate public policies that have a positive impact on achieving gender equality is based on the conviction that the State must play an active role in building egalitarian societies, as a key condition for achieving development.

The uneven progress towards gender equality made in the region's countries shows that there is still a long way to go, especially in terms of strengthening the capacities of States to effectively implement public policies to ensure that they fulfil their obligations with respect to women's human rights.

Information on time use and unpaid work is thus important for socially transformative policies. It affords a better understanding of the obstacles that women face in exercising other rights. These obstacles stem from: the sexual division of labour and their socially prescribed responsibilities in domestic and unpaid care work; and the persistence of gender inequality in the labour market (manifested in terms of precarious jobs and wage discrimination), among other effects of the unequal and unfair distribution of care work. It also reveals the "invisible" value of women's unpaid work, by including, in the system of national accounts (SNA), satellite accounts that measure the domestic production of goods and services in the household. Although the satellite accounts make it possible to estimate the contribution of this type of work in GDP terms, it is not socially valued. Nonetheless, time-use data is key to highlighting the intergenerational reproduction of gender roles and stereotypes.

In Latin America and the Caribbean, time-use survey data has been used to design public actions and policies on care, and also to promote labour market measures that facilitate the reconciliation of work and family life. Some of the contributions made by time-use surveys in the development of actions and policies are described below.

B. The contribution made to care policies by data on time-use and unpaid work

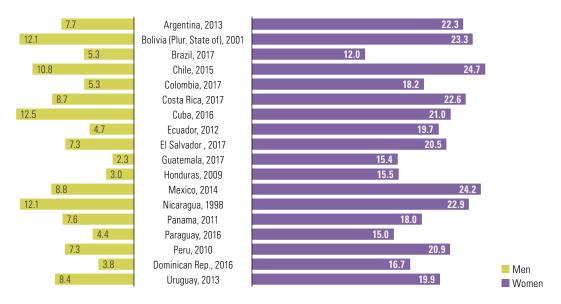
Women undertake most of the unpaid domestic and care work done in households (see figure VI.1). Although this work is essential to enable households and economies to function, it is rendered invisible and valued less than paid work, both socially and economically.

As noted in chapter I, the importance of care and unpaid work has been reflected in various international instruments on women's human rights. Recognizing the importance and value of unpaid domestic and care work affects the different ways in which it is included in the public agenda. Examples include the adoption of international and regional policy instruments, and dissemination of the issue in the media, in both specialized and general-interest publications and in the design of government actions, among others.

Information on the distribution of domestic and care work is a highly valuable resource for influencing sociocultural patterns based on gender stereotypes, and for implementing public policies and actions to challenge existing stereotypes and the predominant gender relations that continue to result in care being provided mainly by women.

The recognition of unpaid domestic and care work, combined with redistribution policies and actions, have sought to reduce the time spent on care tasks that are the responsibility of the State, and to provide basic infrastructure services that enable women to save time, such as the provision of piped water in the home.

Figure VI.I Latin America (18 countries): proportion of time spent on unpaid domestic and care work (Sustainable Development Goal indicator 5.4.1), by gender (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of time-use surveys conducted in the respective countries, information updated on 19 February 2021, and United Nations, "Indicator 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age and location", 2021 [online] https://unstats.un.org/sdgs/metadata/files/Metadata-05-04-01.pdf.

Note: The data displayed encompass domestic and care work for own household, other households or the community, and volunteering, except in the cases of Brazil, Cuba, Guatemala, Honduras, Nicaragua and the Plurinational State of Bolivia. The figures are national totals, except in the cases of Argentina, where they refer to 31 urban conglomerates, and Cuba, where they are limited to Old Havana. The data refer to the population aged 15 years or older, except in the cases of Argentina, where they are limited to the population aged 18 years or older, and Nicaragua, where they refer to individuals aged six years or older.

Considering care as a human right, the government is responsible for redistributing work of this type between the private sector, families, the community and the State itself. It is up to the latter to set standards for the provision of quality services and to decide what actions each of the parties should undertake to ensure there is effective co-responsibility in care. If the time deployed on care in households is reduced, unpaid caregivers can use their time to develop other skills or to enjoy other activities. In other words, public policy actions that disrupt the social organization of care, whether through legislation, regulation or the provision of services, allow people to exercise their right to care and to be cared for. It is therefore important to:

- Recognize care work as a key element for societal well-being and for the functioning of the economy.
- Reduce the burden on women and girls by supporting and covering basic care needs.
- Redistribute care work more fairly between women and men, as well as between households, the State, the private sector and the community.

Incorporating the care agenda into public policies, and prioritizing it, implies recognizing gender inequalities, bringing to light their structural nature and promoting change to bring them to an end. Legislation on maternity and paternity protection, together with support for workers with family responsibilities, are a necessary mechanism for promoting shared responsibility for care between women and men (see box VI.1).

Box VI.1

Programmes that provide direct support for the well-being of children and working mothers

In Latin America and the Caribbean, a number of programmes have been developed that provide direct economic support to their beneficiaries, aimed at improving conditions of access to employment and education. These programmes target mothers, single parents or guardians who are either employed, seeking employment or studying and do not have childcare, to enable them to remain in the labour market and school system. This type of programme draws on information from time-use surveys, especially relating to the person or institution that cares for the child population.

The Programme to Support the Well-being of Children of Working Mothers, run by the Secretariat of Welfare of Mexico is an example.

Source: Mexico, "Acuerdo por el que se emiten las reglas de operación del Programa de Apoyo para el Bienestar de las Niñas y Niños, Hijos de Madres Trabajadoras, para el ejercicio fiscal 2021", Diario Oficial, Mexico City, 28 December 2020.

The following section describes experiences of some of the region's countries in implementing public policies and other government actions in the care area.

Integrated National Care System (SNIC) in Uruguay

Uruguay's Integrated National Care System was nurtured by initiatives from organized civil society, the academic community, the business sector and labour unions, and was supported by United Nations agencies, in the conviction that the absence of a care policy generates and reproduces social and gender inequality (Aguirre and Ferrari, 2014b). Its design began in 2010 with special emphasis on data from time-use surveys. Thus, since its inception, it has recognized that care work traditionally performed by women affects their opportunities to participate in social and economic life. Its target population encompasses both dependents (children under 12 years of age, older adults, persons with disabilities) and those who care for them, whether paid or unpaid (Uruguay, 2015).

The first official SNIC document, *Hacia un modelo solidario de cuidados: propuesta para la construcción del Sistema Nacional de Cuidados*, published by the National Social Policy Council in 2012, includes data from time-use surveys. In presenting the data on the average daily number of hours spent in unpaid work according to sex, age and household per capita income quintile, the document argues that "[this] basic inequity, revealed through time-use surveys, is unacceptable. Time spent on care impacts women's lives and their access to fundamental rights: education, work, health, social security" (Uruguay, 2012, p. 12).

Law No. 19353 creating the SNIC, adopted in 2015, evidences the importance of time use surveys in public care policy and sets objective that include fostering change in the current sexual division of labour, integrating the concept of gender and generational co-responsibility as a guiding principle (Uruguay, 2015). In line with this, the National Care Plan 2016-2020 states that the SNIC aims to modify the current patterns of the sexual division of labour and to adequately value unpaid care work, guided by the substantive principles of solidarity, universality, autonomy and co-responsibility (MIDES, 2015, p. 10). This plan also stresses that the care system substantively implies a cultural change, which will allow women to have more time to undertake personal projects and men to assume their responsibility in care tasks (MIDES, 2015, p. 41).

Although time-use surveys are a privileged source for supporting care policy, other sources of information have facilitated decision-making and have been used to characterize the populations receiving care and the persons who provide it, with or without remuneration.²

In regulatory terms, the information available in the country on time use and paid and unpaid care work has been exploited to support key reforms that institutionalize the care policy. It has also been used to prescribe intersectoral coordination mechanisms, addressing different aspects of the policy in terms of education, health, disability and work (the work of caregivers in the home). It is a comprehensive policy that seeks to change the way in which care work is distributed.

For example, the population census, the National Survey of Persons with Disabilities, the National Household Income and Expenditure Survey, the Education, Health Status and Morbidity Module, together with information on the institutional coverage of care for children, and also the results of specific studies or research.

2. Towards a national care policy for Paraguay

To promote public policies that guarantee full exercise of the human rights of the Paraguayan population, the Inter-Institutional Development Group for the Preparation of Care Policy in Paraguay (GIPC) was established in 2016. The group's objective is to lead a participatory process to construct the care policy. At the same time, a time-use survey was carried out in 2016, the results of which became available in 2017 (DGEEC, 2017).

In this context, objectives and targets were defined, and a roadmap was developed. These were contained in a framework document for the design of the National Care Policy in Paraguay, published in January 2020, which included the information derived from the survey. Thanks to the availability of information, it was possible to support the proposals and definitions of the strategy for preparing the care policy. The framework document analysed the pillars and minimum contents of the national care policy, giving rise to a wide-ranging social and institutional debate. This sought the greatest possible consensus in constructing the care policy and establishing it as one of the pillars of Paraguay's social protection system (Batthyány, 2020).

Work is currently ongoing on the draft bill and on the construction of a National Care System in Paraguay (INE, 2021).

3. National care network and child development in Costa Rica

In 2010, Costa Rica created the National Care and Child Development Network (REDCUDI), as a public, universal and solidarity-funded childcare and development system;³ and in 2014 this was consolidated by Law No. 9220, which created the National Child Care and Development Network⁴ in fulfilment of the National Policy on Gender Equality and Equity (PIEG) 2007–2017. The National Policy aimed to ensure that by 2017, every woman who required childcare services to be able to undertake paid work would have at least one good-quality childcare alternative, whether public, private or of mixed ownership (INAMU, 2007, p. 3).

Although this target is still a long way from being achieved, REDCUDI has a Strategic Plan 2018–2022, which serves as a tool for diagnosis, analysis, reflection and collective decision-making on the network's current activities, and maps the route to be followed in re-envisioning its future and making the necessary changes.⁵

The 2018–2030 PIEG⁶ responds to the international commitments that Costa Rica has ratified on women's human rights and substantive equality. One of its four strategic pillars is the "Distribution of Time".⁷

4. Towards a national care system in Mexico

In Mexico, actions aimed at creating a National Care System have been promoted by the federal legislative and executive branches, as well as by different governmental and non-governmental groups and institutions. In November 2020, the Chamber of Deputies approved, in both general and specific terms, the opinion issued by the constitutional reform initiative that prescribes care as a human right and provides for the creation of a National

³ The document *Red Nacional de Cuido y Desarrollo Infantil en Costa Rica: El proceso de construcción 2010–2014* (National Child Care and Development Network in Costa Rica: The construction process 2010–2014) describes the process of conceptual and political construction of REDCUDI, its background and actors, the interests and values at stake, the forging of alliances and decision-making scenarios (Guzmán León, 2014).

Executive Decree No. 36020-MP of 2010.

⁵ See [online] https://siteal.iiep.unesco.org/bdnp/2226/plan-estrategico-red-nacional-cuido-desarrollo-infantil-redcudi-2018-2022.

See [online] https://www.inamu.go.cr/web/inamu/pieg2018-2030.

It should be noted that PIEG includes several indicators related to the unpaid domestic care work of households which are taken from the time-use survey: average time spent by women and men on unpaid domestic work, disaggregated by type of locality (urban or rural) and age group; total work time; time spent by women and men in recreation and leisure activities. As with the rest of the countries in the region, these indicators are supported by information from other sources. In the case of Costa Rica, these are the National Survey on Perception of Women's Human Rights (ENPEDEMU) 2017, the National Household Survey and the administrative records of INMUJERES of Costa Rica and REDCUDI.

Care System.⁸ Information from the time-use survey was used extensively both in the memorandum explaining the constitutional reform, and in the debates that took place in the open consultation convened by the Congress. This information was based not only on the classic indicators that reveal the time spent on unpaid and paid domestic and care work and total work time, but also on other indicators that display the intersectional nature of the accumulated inequalities suffered by the women of different population groups.

The initiative forms part of the package of actions contained in the National Programme for Equality between Women and Men (PROIGUALDAD) 2020–2024, which pursues strategies that include the following: strengthening the institutional framework for care; increasing the participation of the State, the community and the private sector in caregiving; expanding access to care services; the regulation and establishment of working conditions compatible with family responsibilities and care needs and with decent working conditions for caregivers; and promoting the transformation of sociocultural practices and norms to move towards an equitable distribution of domestic and care work in the home. The programme also includes the creation of a National Care System with a human rights and anti-discriminatory approach, with coordinators that include the National Women's Institute (INMUJERES). These strategies would be supported by the legislative reforms introduced with a view to creating the National Care System.

At the subnational level, Mexico has the Strategic Plan for the Care Economy of Mexico City: Proposal to Create the Mexico City Care System and its regulatory framework. The Political Constitution of Mexico City (2017) guarantees the right of individuals to receive care that sustains their lives and affords them the material and symbolic elements needed to live in society throughout their lives. In addition, the aforementioned constitution orders the competent authorities to establish a care system that provides universal, accessible, relevant, sufficient and good-quality public services. Both for the discussion of the reform to the local constitution⁹ and for the strategic plan to create the care system, information from the time-use survey was used, although on a limited basis owing to problems of representativeness. ¹⁰ This fact is included in the initiative itself, which includes the obligation to generate statistical data to measure total work time (both paid and unpaid), since statistics on paid work are prepared separately in an ad hoc instrument other than the one that collects data on unpaid work.

Guide on care co-responsibility of the National Support and Care System of the Chilean Ministry of Social Development

The *Guía de Corresponsabilidad en el cuidado (*guide on care co-responsibility*)* aims to provide persons involved in the Chilean care system with gender-sensitive information on co-responsibility for care. ¹¹

The third chapter of this guide reports some of the results of the National Time-Use Survey, conducted in 2015 by the National Institute of Statistics (INE) of Chile. It argues that "the time allocated to unpaid work increases women's workload, even though they spend less time than men in employment and commuting" (Chile, 2017, p. 26).

As a strategy for moving towards a co-responsible household, the guide provides tips for measuring time use at home and proposes a series of activities to improve the distribution of household tasks and care work.

6. Bogotá District Development Plan 2020–2024, Colombia

The Economic, Social, Environmental and Public Works Development Plan of the Capital District 2020–2024, of the city of Bogotá, includes implementation of a District Care System that efficiently organizes the District's institutional care provision, as a co-responsible model of care shared between the District, the community, families and the private sector.¹²

This initiative, which is under review by the Senate, proposes amending Article 4 of the Constitution to specify that the State shall guarantee the right to decent care, based on the principle of co-responsibility in care activities between women and men, families, the community, the market and the State itself. See [online] http://www.diputados.gob.mx/LeyesBiblio/iniclave/64/CD-LXIV-III-1P-216/02_dictamen_216_18nov20.pdf.

⁹ See [online] https://www.congresocdmx.gob.mx/archivos/parlamentarios/IN_71_17_07_02_2019.pdf. The bill was submitted to the Congress of Mexico City in 2019 and is still awaiting approval. See [online] https://www.congresocdmx.gob.mx/iniciativas-210-7.html.

In addition to information from the employment survey, other data are included, such as the economic value of the unpaid care work of households derived from the time-use survey, as well as indicators obtained from the Labour and Social Co-responsibility Survey (ELCOS) 2012.

See [online] https://www.chilecuida.gob.cl/2017/12/guia-de-corresponsabilidad-en-el-cuidado/.

¹² See [online] https://www.shd.gov.co/shd/sites/default/files/documentos/Acuerdo_761_de_2020_Plan_de_Desarrollo_2020_2024.pdf.

The plan includes a wide variety of indicators on relevant topics, such as poverty, mortality and school attendance, together with some from the time-use survey. It is important to note that this is possible because the data compiled in Colombia has urban representativeness for the city of Bogotá.

7. National Programme for the Advancement of Women, Cuba

In March 2021, the Cuban Government issued Presidential Decree No. 198/2021, launching the National Programme for the Advancement of Women (PAM). The general aim of this policy is to:

Promote the advancement of women and the equality of rights, opportunities and possibilities, as endorsed in the Constitution of the Republic of Cuba; and to make an in-depth study of the objective and subjective factors that, as expressions of discrimination, persist in Cuban society and hinder greater economic, political, social and family outcomes, with the aim of eliminating them (Cuba, 2021, p. 248).

In the "Economic empowerment of women" area of the plan of action and measures, the Programme makes a strong call to:

Improve and expand the services provided to families, including those related to the care of children and the elderly, or persons with disabilities; as well as those supporting domestic work [...] the organization of such services should be based on the principle of shared responsibility between the State, the non-State sector, communities, families and between men and women (Cuba, 2021, p. 250).

In addition, measure 7 advocates for creating the conditions, where possible, to measure and economically value the contribution of women's unpaid work to the family and social economy (Cuba, 2021, p. 251).

In the area of education, prevention and social work, it highlights the need to:

Consolidate and deepen the promotion and education work carried out by health professionals with community leaders, to achieve healthier habits and lifestyles in the population, in families and especially among women, and awareness of the risk of diseases. (Cuba, 2021, p. 253).

The measure also promotes an increase in community and inter-agency efforts to improve prevention and social care work [...] emphasizing improvement in the quality of life and support for care services and domestic work (Cuba, 2021, p. 253). In addition, it issues a call to:

Adopt educational measures to raise awareness and train community leaders and families generally, on men's participation in the struggle for equality, their role in care activities, shared responsibility, prevention of various forms of gender and domestic violence, and respect for diversity, among other issues (Cuba, 2021, p. 254).

8. Towards a comprehensive care policy with a gender perspective, Argentina

In 2020, the Ministry of Women, Gender and Diversity launched the #CuarentenaConDerechos (#Quarantinewithrights) campaign to promote co-responsibility and a fairer distribution of care tasks within households, especially during the period of lockdown and physical distancing measures. Among other sources, the campaign used data from the time-use questions contained in the Annual Urban Household Survey (EAHU) (2013), to show how care management overburdens women and to promote co-responsibility among all household members.

In early 2020, the Interministerial Panel on Care Policies was formed to articulate and pool the actions of the different ministries with responsibilities in the care area. Following a special meeting convened in the context of the health emergency, a document was published with the title *Hablemos de cuidados: Nociones básicas hacia una política integral de cuidados con perspectiva de géneros* (Let's talk about care: basic notions for a comprehensive care policy with a gender perspective). Based on the diagnostic assessment that the inequitable distribution and

social organization of care is one of the main causes of economic disparities between the genders, including the wage gap and the feminization of poverty, the document proposes action paths to move towards the recognition of care as a right (Interministerial Panel on Care Policies, 2020). In the framework of the Interministerial Panel on Care Policies and under the leadership of the Ministry for Women, Gender and Diversity, a Drafting Commission was created to prepare a draft bill for a Comprehensive Care System Law with a Gender Perspective. Its objectives are to:

Guarantee an integrated and federal care system that promotes gender equality and equity; contribute to greater recognition, redistribution, socialization and remuneration of care, when appropriate; and consider the diverse needs of the individuals who require care, especially children and adolescents, older adults and people with disabilities, and also the diversity of those who provide it (Argentina, 2021).

In July 2021, the Federal Map of Care in Argentina was presented with ECLAC support. One of its objectives is to portray the current social organization of care in Argentina. The information shown on the map will then be used to design better public care policies, in coordination with various agencies, sectors and territories.

The law regulating teleworking (Law No. 27555) includes an article that gives care-providers the right to work schedules that are compatible with the care tasks for which they are responsible, or the right to interrupt their workday, or both (Argentina, 2020).

Recently, the Comprehensive Programme for the Recognition of Periods Contributing to Care Tasks entered into force. This provides for the recognition of years of pension contributions for mothers who are of retirement age (60 and over) and have children but do not have the necessary number of years' contributions. One year of contributions will be imputed for each daughter or son, and two years of contributions for each adopted child. An additional year will be recognized for each daughter or son with a disability; and the periods of maternity leave and its extension will be recognized for women who have made use of these periods at the time of the birth of their descendants.

C. The contribution of data on time use and unpaid work in the labour domain

As the quality and continuity of employment have significant effects on the lives of individuals and their families, policies in this area involve broad inter-agency coordination: social security, support for small and medium-sized enterprises (SMEs), promotion of self-employment, and so forth.

Paid work is one of the areas for which statistics are most widely available, covering the size, composition and distribution of the labour force; economic participation; working conditions (wages, hours, benefits, social security, type of contract); and the unemployed population, among other aspects. Time-use data reveals the relationship between unpaid and paid work, as well as differences by sex, age and other characteristics. In addition to traditional statistics, employment policies should consider the differences brought to light by time-use data, which have the potential to challenge the existing stereotype by interacting with policies in other areas, encouraging the redistribution of unpaid work, and promoting work practices that enable a different use of time (Marco Navarro, 2012). Examples include encouraging greater participation in care by men, the labour market and the State itself; as well as considering the reasons why women abandon the labour market. In this context, some statistical instruments are already incorporating questions to ascertain the reason for not entering, or for dropping out of, the labour market or school.

Policies to improve working conditions and encourage greater participation by women in the labour market tend to focus on aspects that can improve the balance between work and family life (parental leave) (see box VI.2). In contrast, they seldom strive to generate favourable conditions enabling families to redistribute their time; through guaranteed care services.

Box VI.2

Parental leave in Latin America and the Caribbean

Most countries in the region establish parental leave in terms of a minimum number of weeks after childbirth, which varies from country to country. For example, in Argentina, maternity leave lasts 13 weeks, whereas fathers are granted two days. Uruguay has a state-of-the-art paternity law (Law No. 19.161); and, along with Chile and Cuba, it is one of the countries in the region that provide for parental leave, that is, leave that can be claimed by fathers and mothers alike.

Since 2013, Uruguay has had a maternity leave of 14 weeks and a paternity leave of up to 13 consecutive days for most fathers. In addition to extending both maternity and paternity leave, the law defined a half-time parental leave period to be used at the end of the maternity period, lasting through the first six months of the baby's life. This leave, referred to as care leave, can be used by the mother or the father at the couple's discretion. Although is mostly used by women (98%), Uruguay is one of the few countries in the region that allows fathers to take parental leave.

In Mexico, the law was reformed in 2017 to require employers to grant five days of paternity leave for, and 14 weeks of maternity leave, as established in Convention No. 183 of the International Labour Organization (ILO).

Source: United Nations Children's Fund/International Policy Centre for Inclusive Growth (UNICEF/IPC-IG), *Maternidad y paternidad en el lugar de trabajo en América Latina y el Caribe*: políticas para la licencia de maternidad y paternidad y apoyo a la lactancia materna, Brasilia/Panama City, 2020.

In a smaller proportion, but with growing demand, there are public policies that propose a reduction in paid hours of work, as well as greater flexibility and coordination of working hours, for women and men alike. Although the policy proposals developed along these lines are not always identified as time-use policies, they are relevant because they include a time dimension to ensure a better quality of life and create better opportunities for women and men who work in the labour market.

Owing to the increase in unpaid care work during the coronavirus disease pandemic (COVID-19) (see box VI.3), the countries of the region implemented a range of measures to address the effects of the crisis on care (see box VI.4).

Box VI.3

The impact of the COVID-19 pandemic on paid work

The crisis triggered by the coronavirus disease (COVID-19) pandemic is generating social and economic consequences for all people, and especially women. Women are in the front line of the response to the pandemic (health-sector workers, caregivers in institutional or home settings). However, many work without protocols or the necessary protective measures. Examples include paid domestic workers, who occupy a crucial place in the response to the crisis given the central role they play in caring for children, the sick and dependent persons.

This situation has also engendered labour and economic instability in much of the population, especially among women; and the situation has widened the inequality gap in the labour domain (living wage, social security and protection, etc.).

In times of crisis, women are usually the first to lose their jobs, as indicated by data from employment surveys. These show that, during the pandemic, women's labour market participation fell back to the levels prevailing in the 1990s. Time-use data have demonstrated that the excessive burden of unpaid work generated by the closure of schools and care centres is a major barrier to women's participation in the labour market.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), Social Panorama of Latin America, 2020 (LC/PUB.2021/2-P/Rev.1), Santiago, 2021.

Box VI.4

Latin America and the Caribbean (6 countries): actions and initiatives on care implemented by governments in the midst of the coronavirus disease (COVID-19) pandemic

The lockdown and physical distancing measures adopted to contain the effects of the coronavirus disease pandemic (COVID-19) have resulted in an abrupt reduction in institutional care arrangements (schools and care centres, care centres for dependent persons), a reduction in paid domestic work (which considerably affected women who perform this mostly precarious work in informal conditions, and less care support provided by relatives and neighbours). In this context, the temporary closure of schools and care centres, the pressure on health systems and the increase in the number of activities in households increased care work and the time devoted to it exponentially, while maintaining the unequal distribution of the burden, which falls mainly on women.

Latin America and the Caribbean (6 countries): actions and initiatives on care implemented by governments in the midst of the coronavirus disease (COVID-19) pandemic



ARGENTINA

Justification of absence from work by the parent or responsible adult caring for children or adolescents, whose presence at home is indispensable during the suspension of school classes. Only one parent or responsible person per household may use this dispensation.



CHILE

Approval of Law No. 21227 on employment protection, which provides that in the event of suspension of the contractual relationship between the employer and the worker, or a reduction in working hours, the worker will receive part of his or her pay through unemployment insurance. The law encompasses domestic workers who contribute to the pension system, allowing them to draw down their severance accounts if their contracts are suspended through the law. Workers are able to make partial monthly withdrawals equivalent to a declining proportion of the wage, starting at 70% of their earnings in the first month.



COSTA RICA

Continued provision of services by the National Child Care and Development Network (REDCUDI), with the aim of supporting mothers and fathers who remained in their jobs, and preventing childcare responsibilities from being devolved to the elderly or at-risk groups that constitute their family support networks.



MEXICO

Implementation and dissemination of campaigns through social networks and the media to promote the redistribution of domestic and care work in households, avoid overburdening women, and increase the participation of men during the crisis caused by the COVID-19 pandemic. A key example is the national campaign titled *Hombres en sana convivencia: en esta contingencia, cuidar hace la diferencia* (Men in healthy coexistence: in this contingency, caring makes the difference).



TRINIDAD AND TOBAGO

Creation of "pandemic leave" especially targeting working parents without access to a support system for the care of their children during school closures. As part of this measure, employers are encouraged to implement teleworking policies, where possible, to minimize the need for employees with children to face disciplinary action or suffer a pay cut.



URUGUAY

Strengthening of transfer programmes, such as the Uruguay Social Card Program, and child allowances to support women's economic livelihoods.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data available in COVID-19 Observatory in Latin America and the Caribbean, and Economic Commission for Latin America and the Caribbean (ECLAC)/United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), Care in Latin America and the Caribbean in times of COVID-19: towards comprehensive systems to strengthen response and recovery, 2020.

D. The contribution of data on time use and unpaid work in other area

The analysis of time-use data is fundamental for the design, implementation, monitoring and evaluation of public policies that enable societies to achieve sustainable development.

Gender equality and the rights and empowerment of women and girls play a central role in the 2030 Agenda and the Sustainable Development Goals.

While time-use surveys have been used most widely to inform public policies that aim to recognize and value unpaid domestic and care work through the provision of public services (SDG target 5.4), time-use data should not be reduced to monitoring indicator 5.4.1 alone. This could foster the misconception that this important statistical tool only provides information on the proportion of unpaid work and could compromise its ranking in the national statistical system.

The time-use data collected and analysed has revealed the following: the existence of a very close link between income poverty (SDG 1) and time poverty; most health care is provided by households (SDG 3) and the activities in question are socially assigned to women in general; the provision of early childhood education services (SDG 4) not only prepares children for primary school, but also frees up time for their caregivers; the sexual division of labour is a structural challenge to overcoming gender inequalities (SDGs 5, 8 and 10); and the lack of services such as clean water, electricity or transport infrastructure increases unpaid work time and affects women disproportionately (SDGs 6, 7, 9,11) (ECLAC, 2017a; Vaca Trigo, 2015).

1. Poverty reduction policies

Poverty can be broadly defined as the material deprivation of essential assets and opportunities experienced by individuals, but also by collectives (households, communities).

From this perspective, in addition to material deprivation, poverty also includes subjective dimensions that go beyond material subsistence. Moreover, feminist movements have highlighted the need to recognize the fact that women suffer poverty differently than men; and that gender is a factor, along with age, ethnicity and geographic location, among others, which affects poverty and increases to the chances of women suffering from it. In this sense, "the probability of being poor is not randomly distributed in the population," as pointed out by Gita Sen (1998, p. 127). In other words, poverty is a multidimensional phenomenon that encompasses aspects of living conditions that violate people's dignity, limit their rights and prevent them from meeting their basic needs (CONEVAL, undated).

Women have less access to resources, owing to the restricted opportunities assigned to them through the sexual division of labour and the social hierarchies that are constructed on the basis of this division. This generates a situation of deprivation in different social spheres, particularly in three tightly linked systems: the labour market, the welfare or social protection system and households (Ruspini, 1996).

The gender perspective improves understanding of how the household functions, since it reveals the hierarchies and distribution of resources, and it questions the unfair and unequal distribution of unpaid domestic and care work that prevails in society. This vision points to a conceptualization of poverty that considers other dimensions, such as unpaid work, which restricts women's access to income of their own.

In accordance with this broader conceptualization of poverty, economic autonomy constitutes another important dimension for highlighting how poverty affects men and women differently. Economic autonomy means that individuals have their own income, which enables them to satisfy their needs; the inequality of opportunities that affects women in terms of access to paid work is detrimental to their possibilities for achieving this autonomy.

Thus, unpaid work is a central concept in the analysis of poverty from a gender perspective, since it does not respond to a monetary rationale, but satisfies needs and enables social reproduction. For this reason, its close relationship with the processes of women's impoverishment has also been studied, and the need to measure domestic and care work, and quantify it in monetary terms, has been emphasized.

The data obtained from time-use surveys thus makes it possible to incorporate a key element in the measurement of poverty from the gender inequality perspective: the asymmetrical distribution of time. In other words, there is a dimension of poverty associated with the situation of persons who bear a considerable burden of household chores and care demands, which reduces their ability to make decisions on how to allocate their time. This type of deprivation has been referred to as time poverty.¹³

Time-use surveys have been fundamental for making progress in research and methodological reflection to incorporate time measurement in poverty eradication strategies and policies. Nonetheless, the incorporation of the time-poverty approach, fundamentally in respect of women, is still pending in both official poverty measurements and in public policy decisions.

2. Natural resource policies

The sexual division of labour and dominant cultural patterns also affect environmental problems and the consequences of climate change in the everyday life of households. Rural, indigenous and campesino women are guardians of biodiversity; but, in conditions of great fragility and exploitation, they have less access to, or control over, land and productive resources; and they shoulder the main responsibility for providing food for their family members, collecting water and firewood, and tending vegetable plots and animals (ECLAC, 2017b).

Improvements in access to water and sanitation help to improve the situation and autonomy of women living in poverty, who are usually responsible for collecting and storing water for the household; such improvements also help reduce the time spent on preserving the health of household members, thereby easing their health-care burden.

The proportion of expenditure that poor households spend on access to water is even greater when considering the time it takes for families to reach water sources, which are generally of lower quality and further away from the home.

Time-use data provide useful inputs to development policies for the improvement of public infrastructure to provide or facilitate childcare services, school transport, extended hours in schools and care centres, as well as services related to the care of the sick and persons with disabilities in rural areas.

3. Urban development and transportation policies

Urban and transport planning is essential for improving the quality of life in cities, and it plays a key role in the development of economic and social activities.

Time-use data can thus complement mobility surveys and can be used in the design and planning of government policies and actions related to transport and urban development.¹⁴ Many Latin American cities suffer from problems

The term "time poverty" refers to the restriction of opportunities and capacities resulting from not being free to allocate time to different activities. Some countries in the region have made conceptual and empirical contributions on this subject. See National Women's Institute/United Nations Entity for Gender Equality and the Empowerment of Women (INMUJERES/UN-Women), Pobreza y tiempo: una revisión conceptual, Mexico, 2015 [online] https://mexico.unwomen.org/es/digiteca/publicaciones/2015/10/pobreza-y-tiempo e Incorporación de la dimensión de género en la medición multidimensional de la pobreza, Mexico, 2016, [online] https://www2.unwomen.org/-media/field%20office%20mexico/documentos/publicaciones/2016/cuaderno%20genero%20medici%C3%B3n%20multidimensional%20pobreza.pdf?la=es&vs=447.

For example, origin and destination surveys are a source of data on daily spatial mobility, since they collect data on the volume and direction of daily population flows and also provide a detailed picture of travel patterns (modes of transport, schedules, motives for travel, etc.). These studies generate useful data for road infrastructure planning and the relationship between urban structure and travel, as well as for analysing the links between sociodemographic characteristics and habitual mobility. Mobility surveys have shown that women and men move around cities differently, and that, for women, mobility processes take longer although shorter distances are covered. In addition, women spend more time on care-related mobility (Hernández, 2019).

such as congestion and long commuting times, and inadequate infrastructure. Thus, better urban planning would involve a transportation system that contributes to improving people's quality of life and freeing up their time to be used for productive activities, recreation or self-care.

Recently, especially during the pandemic, the dispersal of activities, and the implementation of teleworking systems at home (home office) have been encouraged. Undoubtedly, this work modality can reduce commuting times within cities for many people. However, from the standpoint of the quality of working conditions, there is concern about job insecurity and work overload. Time-use surveys provide valuable information for understanding and regulating this type of work more effectively. For example, in Mexico, in January 2021, reforms to Article 311 of the Federal Law on Teleworking came into force. This reform provides an opportunity to create flexible work arrangements that are compatible with care needs and allow both women and men to reconcile their work and family responsibilities, without diminishing their social benefits.

4. Health policies

Time-use data has the potential to reveal how women assume many of the tasks of care and tending to the health of members of their own and other households. Increasingly, the application of time-use surveys is being encouraged to measure the time dedicated specifically to this type of care. This is not negligible, since it includes time spent in visits to medical staff, consultations and collecting medicines, among other direct health care tasks. Its valuation relative to GDP, as estimated in health-sector satellite accounts, sheds light on how care work is being shifted from health-care institutions to households. It also reveals the deficit in the sector which the competent institutions need to consider, in order to fulfil obligations that do not correspond to individuals and cannot be delegated to households.

The information also helps analyse the effect of having insufficient time to engage in the physical activities necessary for personal health; so it can be used to develop suitable interventions to encourage physical activity among the population, particularly among young women.

The National Institute of Statistics and Geography (INEGI) of Mexico estimates the value of unpaid work in households through the satellite account for unpaid household work. In 2019, it made an adjustment to the annual calculation of the goods and services accounts, to incorporate updated information obtained from the 2019 National Time-use Survey (ENUT) and other sources.

E. Economic value of unpaid work

Two of the most widely disseminated data in the media and in public discourse have been the estimation of the economic value of unpaid work and its comparison to GDP. Data on unpaid work performed in households is a fundamental input for this estimation. Clearly, recognition of the importance of this type of work needs to be matched by the design of public actions to promote its redistribution within households. It is also necessary to foster the co-responsibility of the market in the organization of workers' time and labour obligations, so that such recognition is not confined to the media or the public sphere.

The need to assign a value to this work is linked to the importance of measuring the fundamental contribution made by women to unpaid domestic work (that is, to housework and care), a situation to which time-use surveys have made a fundamental contribution (Godoy, 2004).

The valuation of unpaid work in the SNA framework provides a more accurate measure of what society produces (revealing a part of the economy that would otherwise remain hidden from view); and it makes it possible to incorporate the contribution made by this type of work into macroeconomic analysis and decision-making (ECLAC, 2017a).

It also serves to better understand the economic dynamics that operate both within and between households, and between households and the rest of the economy, which is fundamental for integrating the analysis of the care economy into the functioning of the economic system. This is particularly important, because it provides evidence of women's contribution to the economy and provides material for the main debates on heterodox economics.

This information is also vital for formulating policies that create the conditions needed for the responsibilities and benefits of unpaid work to be shared equally between men and women, with participation by the community and the State as jointly responsible for the well-being of all members of society.

At the regional level, the Counting Unremunerated Work Act of Trinidad and Tobago (Trinidad and Tobago, 1996) was one of the first laws in the region to task the national statistical office with periodically implementing time-use surveys, with the aim of calculating the monetary value of unpaid work for men and women separately; and to use these measurements to complement the recording of GDP.

In Argentina, Article 10 of Law No. 27532 of 2019 includes the satellite account for unpaid domestic and care work in the system of national accounts. Similarly, the 2009 Political Constitution of the Plurinational State of Bolivia recognizes the economic value of household work as a source of wealth, and indicates that it should be quantified in the public accounts.

Colombia issued Decree No. 2490 of 2013, which created the Intersectoral Commission for the Inclusion of Information on Unpaid Household Work in the System of National Accounts, mandated by Law No. 1413 of 2010. ¹⁵ In February 2021, the National Administrative Department of Statistics (DANE) reported changes to the form used in the 2020–2021 National Time-Use Survey, as an outcome of collaboration and dialogue between the statistical authority, public entities and civil society. ¹⁶

In Costa Rica, Law No. 9325 of 2015, Accounting for the Contribution of Unpaid Domestic Work in Costa Rica, was adopted to regulate the measurement of the care economy pursuant to SNA requirements. ¹⁷ This law provides that the surveys will be financed by the Government of the Republic.

Recently, the Central Bank of Chile updated the value of unpaid work in households. Prior to the pandemic, the value in question was estimated as approximately 21% of GDP, about two-thirds of which being produced by women. Preliminary estimates suggest that this had probably risen to 26% of GDP by 2020 (Avilés-Lucero, 2020).

Article 325 of the 2008 Constitution of the Republic of Ecuador guarantees the right to work, recognizes all work modalities, and considers all workers as productive social actors. In Article 333, it considers unpaid work for self-support and human care performed in households as productive work; and promotes co-responsibility, and reciprocity between men and women in domestic work and family obligations.

In 2009, Mexico became the first country in the region to calculate the economic value of unpaid domestic and care work in households, estimating it at 22.6% of GDP. By 2018 this had risen to 23.5%; and in 2019 it was estimated at 22.8% (INEGI, undated). In terms of public policies, this indicator was used for follow-up of the 2013–2018 National Programme for Equality between Women and Men (PROIGUALDAD); and the indicator was also used in the diagnostic assessment that led to PROIGUALDAD 2020–2024.¹⁸

Ten countries in the region currently have information on the economic value of unpaid household work relative to GDP (see table VI.1). In general, the data in question show that the economic contribution of unpaid work is equivalent to around 20% of GDP, and that women are responsible for 70% of this.

See [online] https://www.dane.gov.co/index.php/estadisticas-por-tema/cuentas-nacionales/cuentas-satelite/cuentas-economicas-cuenta-satelite-economia-del-cuidado/informe-de-gestion-ley-1413-de-2010.

See National Administrative Department of Statistics (DANE), Informe de gestión: Ley núm. 1413 de 2010, 2021 [online] https://www.dane.gov.co/files/investigaciones/boletines/cuentas/ec/20_informe_semestral_Ley_1413.pdf.

See [online] https://www.inamu.go.cr/valoracion-del-trabajo-domestico-no-remunerado.

See [online] https://www.gob.mx/inmujeres/acciones-y-programas/programa-nacional-para-la-igualdad-entre-mujeres-y-hombres.

Table VI.1
Latin America (10 countries): economic value of the unpaid work of households, 2010–2019 (Percentages of GDP)

Country	Year	Total
Argentina ^a	2020	21.8
Chile ^b	2020	25.6
Colombia	2017	20.0
Costa Rica	2017	25.3
Ecuador	2017	19.1
El Salvador	2010	21.3
Guatemala	2014	18.8
Mexico	2019	22.8
Peru	2010	20.4
Uruguay ^c	2013	22.9

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the valuation of unpaid work from the bodies governing each country's national accounts.

F. Challenges for strengthening measurement and making increased use of time-use survey data

Time-use surveys have proven a valuable instrument for placing the issue of unpaid care work on the women's equality agenda in the region, and also for supporting other public policies.

In terms of policies on behalf of gender equality, developments in recent years have paved the way to support initiatives, strategies, programmes and actions in the care domain. The information provided by time-use surveys, combined with significant inter-agency work, has made it possible to raise public awareness of the unfair social organization of care and the excessive burden of work done by women without pay. There is a growing awareness of the huge analytical potential of this data source.

However, more robust surveys need to be implemented at the regional level to afford greater international comparability. They need to become part of the official statistics of the countries of the region and be implemented periodically. They must also enable greater levels of disaggregation, to reveal how the use of time and its distribution underpin inequalities that go beyond the economic domain and explain other vectors of discrimination, but at the same time interact with them.

This chapter has highlighted a number of challenges facing time-use surveys, both in terms of data sources and their use, and also in terms of legislation, institutional arrangements and the need for sufficient funding to ensure they are carried out, widely disseminated and used for public policy. The challenges include the need to:

 Strengthen the legal frameworks for conducting time-use surveys and for calculating the economic value of unpaid work in the national accounts.

^a The calculation corresponds to the exercise carried out by the National Office of Economy, Equality and Gender of the Ministry of Economic Affairs, including the effects of the pandemic, *Los cuidados, un sector económico estratégico. Medición del aporte del trabajo doméstico y de cuidados no remunerado al producto interno bruto,* Buenos Aires, 2020.

b The calculation represents the share of unpaid domestic work in the expanded gross domestic product, as estimated by the Central Bank of Chile in 2020. For further information see [online] https://www.bcentral.cl/documents/33528/3015423/estimacion-trabajo-domestico-no-remunerado.pdf/977aa3c3-7a61—20fe-be66-85c68c7707b0.

^c The calculation, which is not official, corresponds to the exercise carried out by S. Salvador, "La valoración económica del trabajo no remunerado" in *Los tiempos del bienestar social: género, trabajo no remunerado y cuidados en Uruguay*, K. Batthyány (ed.), Montevideo, National Women's Institute, 2015.

- Guarantee the periodicity of time-use measurements and their comparability over time, in order to monitor the distribution and use of people's time and the effect of government actions. To this end, sufficient funding must be guaranteed to be able to implement time-use surveys on a regular basis.
- Institutionalize time-use surveys, so that they become part of the regular NSO survey programme. This would enable them to be used more effectively in the design, monitoring and evaluation of public policies.
- Foster linkages between the producers of time-use data and their users, so that the information produced
 can support public policies for women's economic autonomy. In this regard, inter-agency alliances between
 NSOs and the machineries for the advancement of women need to be strengthened further, to give
 continuity to ongoing time-use survey projects and encourage future work. Technical collaboration should
 be established, spanning the design stage through to using the information for calculating indicators, and
 also in dissemination activities.
- Forge alliances with other key stakeholders, such as central banks, other sector ministries (ministries of social development, environment, economy, transportation and others), local governments, the media and regional and international organizations, for the purposes of needs identification, technical cooperation, promotion and increased dissemination of the results, and positioning of the topic in different political advocacy spaces.
- Stimulate calculation of the economic value of unpaid domestic and care work in satellite accounts to the region's national accounts.
- Take steps to broaden the representativeness of time-use surveys and possible disaggregations, so that
 the information can be used for the design, implementation, monitoring and evaluation of public policies
 at the subnational level; and, insofar as possible, include variables that make it possible to analyse the
 intersectional nature of inequality and discrimination.
- Strengthen the use of regional and global standards to move towards regionwide comparability and
 harmonization in time-use surveys in the region, not only to fulfil international commitments, but also to
 obtain parameters for monitoring and evaluating relative progress, based on the experiences of the countries
 in the region. In this context, it is recommended that the next time-use surveys in the region should use
 the Minimum Set of Time Use Activities for Latin America and the Caribbean as a minimum standard.
- Make progress in integrating time-use surveys with other data sources, to strengthen the analytical capacity of these instruments.
- Strengthen, and continue the work of, the statistical community of practice of the Working Group on Gender Statistics in the region.

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