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Demographic and social statistics: gender statistics:
 progress on time-use surveys

Progress of a project on gender issues in the measurement of paid and unpaid work

Report of the Secretary-General

Summary

   The Statistical Commission, at its thirty-first session, recognized the importance of the work of the United Nations Statistics Division on gender issues and the measurement of paid and unpaid work. This work was developed under a project initiated with the United Nations Development Programme (UNDP) and the International Development Research Centre/Canada (IDRC). The present report describes project activities. It also presents an outline for a technical guide on methods for conducting time-use activities and the conclusions of an expert group relating to the guide. Points for discussion by the Commission are contained in paragraph 14.

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  * E/CN.3/2001/1.

Contents

Introduction

1. At its thirty-first session, the Statistical Commission reviewed the report of the Secretary-General on the implementation plan of a project on gender issues in the measurement of paid and unpaid work (E/CN.3/2000/13); and "recognized the importance of the work on the measurement of paid and unpaid work by the Secretariat as set out in the report, and noted additional work being carried out by various countries and agencies, particularly on time-use surveys".[1]

2. The activities undertaken in the year 2000 focused on (a) reviewing methods and classifications used in national time-use studies to develop a set of international guidelines for collecting time-use data, particularly in developing countries, and to revise and further develop a trial international classification of activities for time-use statistics; and (b) improving statistics on participation in difficult-to-measure sectors of the labour market.

I. Progress report on project implementation

A. Developing methods and classifications for time-use surveys

3. Since 1995, data-collection activities on time use have been either completed or initiated in 24 developing and 22 developed countries. Eight developing countries have recently completed nationally representative data collection on time use and generated statistics on time spent by women and men in paid and unpaid work. Five of these countries — India, Mongolia, the Occupied Palestinian Territory, the Republic of Korea and South Africa — conducted independent time-use surveys, while two countries — Oman and the Lao People's Democratic Republic — implemented a "light" time-use diary as a module to a multi-purpose household survey. Nepal collected time-use data by integrating appropriate questions in a labour-force survey. India, the Lao People's Democratic Republic, Nepal and the Republic of Korea have published the results of their surveys; in addition, India, Mongolia and the Lao People's Democratic Republic organized user forums to disseminate the survey findings and discuss their

policy implications. The interest by developing countries in undertaking time-use surveys and the national experiences now accumulating point to the need for and the timeliness of preparing methodological guidelines and classifications for time-use surveys.

4. Technical assistance was provided by the United Nations Statistics Division to China, Mongolia, South Africa and Thailand during the past year in one or more of the following areas: designing surveys, developing national activity classifications, defining statistical measures and relevant tabulations, and evaluating survey estimates. In addition, technical advice was provided to Cuba, Guatemala and the Philippines through participation in regional conferences on time-use surveys. Regional conferences in Africa, Asia and the Pacific, and Latin America and the Caribbean, and the twenty-third special session of the General Assembly entitled "Women 2000: gender equality, development and peace for the twenty-first century" provided the opportunity to promote the collection of time-use data in developing countries.[2]

5. Work has also progressed on the development of an international classification of activities for time-use statistics. The trial international classification that was approved by an expert group convened by the United Nations Statistics Division in 1997 was tested in India, Mongolia, Nigeria, the Occupied Palestinian Territory, the Philippines, Thailand and South Africa. Based on experiences of these countries as well as of developed countries (countries participating in the Harmonized European Time-Use Surveys, Canada and Australia), the classification was revised and extensively elaborated.

6. The classification provides a comprehensive set of categories of activities associated with household production of goods for own final use and informal sector activities. These activities are an important component of the work of women and, to some degree, of the work of men in developing countries but are not defined in most classifications of activities for data collection on time use. While placing a stronger emphasis on economic activities that are often not perceived as such, the classification is built on existing national and regional classifications of time-use activity and is consistent with the historical data sets that are based on these schemes.

7. An Expert Group Meeting on Methods for Conducting Time-Use Surveys was convened in October 2000 to discuss methodological guidelines for the conduct of time-use surveys and to review the revised classification. The papers prepared for the meeting and the discussion will be major inputs to a methodological publication on collection of data on time use aimed towards the harmonization of methods and at providing advice to developing countries interested in undertaking time-use surveys. The draft Guide will be completed in 2001. The report of the meeting and the proposed outline for the methodological publication are included as annexes I and II, respectively, to the present report.

8. The expert group recommended that countries be encouraged to test the revised classification. Two approaches to testing were proposed: in countries that had already conducted time-use surveys, the coding of a sample of completed survey diaries to the classification; and in countries planning new surveys, the use of the classification. The United Nations Statistics Division is collaborating with countries in testing the classification using the first approach. The classification will be reviewed and further refined based on the results of these tests and country experiences.

9. The expert group meeting supported the efforts of the United Nations Statistics Division under the project to improve measurement of paid and unpaid work. In particular, the expert group meeting recommended that "the United Nations Statistics Division take on the responsibility for coordinating international work on the development of time-use statistics and urged that the coordination be undertaken in cooperation with other agencies with an interest in this area, including the United Nations Development Programme (UNDP), the International Labour Organization (ILO) and the Statistical Office of the European Communities (Eurostat)" (see Annex I, para. 31).

10. A web site on time-use surveys: improving measurement of paid and unpaid work (http://www.un.org/Dept/unsd/timeuse) was published on the United Nations Statistics Division home page in May 2000. The site makes available information on national time-use surveys including design specifications, classifications, technical manuals, and survey instruments. The site also includes papers prepared for the expert group meeting on time-use surveys and other international materials on time use.

Plans for further development of the site include the publishing of time-use survey data.

B. Improving statistics on participation in difficult-to-measure sectors of the labour market

11. The United Nations Statistics Division collaborated with ILO and Women in Informal Employment: Globalizing and Organizing (WIEGO) on methodological research and testing on the inclusion of the variable "place of work" in household surveys — particularly labour-force surveys — with the objective of improving the identification and estimation of home-based workers and street vendors. The main output of this work will be the development of an appropriate conceptual framework and typology of place of work. The research and testing, initiated in October 1999, included a pilot study in Jordan where a question on place of work was included in the labour-force surveys; in addition, analyses of results from new surveys in South Africa and earlier surveys in Colombia, Mexico and Bolivia were prepared.[3]

12. ILO convened an experts' meeting in August 2000 to review the results of the pilot work and the analytical studies. The Expert Group on Informal Sector Statistics (Delhi Group) also reviewed this work and recommended that countries include the variable place of work in labour-force and informal sector surveys.[4]

13. The project also continued to collaborate with WIEGO, the aforementioned worldwide coalition concerned with statistics, research, programmes and policies on women in the informal sector of the economy. Joint activities include compilation and analysis of statistics on women in the informal sector, and improving measurement of employment and output in the informal sector in general, and among homeworkers and street vendors in particular. The initial compilations and analysis on gender issues in the informal sector were published by the United Nations Statistics Division in chapter 5 of *The World's Women 2000: Trends and Statistics*.[5]

II. Points for discussion

14.   The Commission may wish to:

(a)   Express its views on the outline for the Guide to producing statistics on time use for measuring paid and unpaid work (annex II), including any additions or modifications. The Commission may also wish to comment on the recommendations of the expert group on the development of the Guide (see annex I);

(b)   Bring to the attention of the United Nations Statistics Division related work and activities.

Notes

[1]   *Official Records of the Economic and Social Council, 2000, Supplement No. 4* (E/2000/24), para. 22.

[2]   See "Towards international guidelines in time-use surveys: objectives and methods of national time-use surveys in developing countries", paper presented at the Regional Seminar of Users and Producers of Household Surveys and Time-Use Surveys held in Havana, Cuba, from 18 to 20 January 2000, and at the International Seminar on Time-Use Studies held in Ahmedabad, India, from 7 to 10 December 2000.

[3]   See papers presented at the Technical Meeting on Measurement of Place of Work held in Geneva on 24 and 25 August 2000.

[4]   See draft report of the fourth meeting of the Expert Group on Informal Sector Statistics (Delhi Group), Geneva, 28-30 August 2000.

[5]   United Nations publication, Sales No. E.00.XVII.14.

Annex I

Report of the Expert Group Meeting on Methods for Conducting Time-Use Surveys, New York, 23-27 October 2000

I. Organization of the meeting

1.   The meeting was held at United Nations Headquarters, New York, from 23 to 27 October 2000. The following experts participated: Oladejo Oyeleke Ajayi (Nigeria), Michael Bittman (Australia), Debbie Budlender (South Africa), Gustav Haraldsen (Norway), Andrew S. Harvey (Canada), Diane Herz (United States of America), Indira Hirway (India), Eivind Hoffmann (International Labour Organization (ILO)), Thomas Juster (United States of America), Patricia Mendez (Mexico), Yandiswa Mpetsheni (South Africa), Iiris Niemi (Finland), Yeruugerel Noov (Mongolia), Christina Osterberg (Statistical Office of the European Communities (Eurostat)), R. N. Pandey (India), David Paton (Canada), Klas Rydenstam (Sweden), Aelee Shon (Republic of Korea) and Diane Steele (World Bank). The United Nations Development Programme (UNDP) was also represented.

2.   The meeting was convened as part of the work of the United Nations Statistics Division on time-use statistics under a project funded by UNDP and the International Development Research Centre/Canada (IDRC) on gender issues and the measurement of paid and unpaid work. It follows up on the recommendations on time-use statistics of the Statistical Commission at its twenty-eighth and thirty-first sessions and on the Platform for Action[a] adopted by the Fourth World Conference on Women.

3.   The meeting discussed methodological guidelines for the conduct of time-use surveys and reviewed the further development of the trial United Nations international classification of activities for time-use statistics. The papers prepared for the meeting and the discussion will provide the major input to a methodological publication that the Statistics Division is preparing to assist developing countries in carrying out time-use surveys. Mr. Bittman presided.

II. Recommendations relating to methodological guidelines for time-use surveys

4.   The meeting agreed on the following main points on the development of the methodological publication entitled "Guide to producing statistics on time-use for measuring paid and unpaid work".

Basic approach of the "Guide"

5.   In recent years, developing countries have for the first time begun to conduct national time-use surveys. This experience now shows that national time-use surveys can be conducted successfully in developing countries. Though special considerations come into play in collecting data in populations with low levels of literacy, the main survey design issues are often similar to those of developed countries.

6.   The "Guide" will be aimed at providing advice to developing countries interested in undertaking time-use surveys and, more broadly, towards harmonizing methods for wide national use. It builds on the recent experiences of developing countries and on the new Guidelines on Harmonized European Time-Use Surveys.

7.   The "Guide" will not be prescriptive in nature but will discuss what has been done in countries, the lessons learned therefrom, and the advantages and disadvantages of alternative options. For each aspect of survey design, it will discuss the requirements for good design and what can be done to achieve this. Feasible options or the minimal acceptable requirements will be provided. In addition, it will identify the areas that require further methodological work. The "Guide" will focus on aspects of design that are unique to time-use surveys.

8.   Agreed points relating to main design issues for development in the "Guide" follow.

Rationale and objectives for conducting time-use surveys

9. The discussion focused on the importance of time-use surveys for both policy and research questions. Experts stressed the need to develop a convincing rationale for use in requests for funds to undertake these surveys. It was recommended that the "Guide" contain examples of how time-use statistics had been used to influence government policy.

10. Categories of objectives for undertaking time-use surveys were identified. One cluster refers to the need for statistics for population groups; and the other to the need for statistics for the individual or household level. Objectives relating to the aggregate or population level include the following issues: (a) improvement of national accounts estimates and the preparation of household satellite accounts; (b) gender equality including the measurement of paid and unpaid work, and improvement of data on the economically active population, especially on the self-employed and persons in non-standard working arrangements; (c) poverty eradication strategies, including statistics on the provision and need for governmental services as well as the provision of water, fuel and the infrastructure for travel; and (d) social indicators relating to changes in broad categories of economic activity. The second cluster relates to individual or microlevel analysis and includes household division of labour, training as investment in work, consumer behaviour, travel patterns and time use.

11. Governments of both developing and developed countries will be interested in using time-use data for the first set of issues. Microlevel issues will be of interest mainly to the scientific community. The "Guide" will emphasize the importance of a consultative process involving producers and users of time-use data to explore the various interests and data needs, with a view as well to identifying potential survey sponsors. It will also explain the need to balance the interests of sponsors with considerations of quality and overall usefulness of the survey data.

12. The "Guide" will need to define specifications in terms of survey objectives. Priority will be given to design considerations relating to improved measurement of work and economic accounting. Broader issues will also be considered.

Survey contents

13. The decision on which context variables and what level of detail are to be included is closely related to the analytical objectives of the data collection. Context variables needed for the proper understanding of activities that have been reported in the diary will also need to be included. Guidance will be provided on how different types of context variables should be collected in the survey instruments and how the collected information should be used for effective coding to the relevant classifications.

14. Recording simultaneous activities is important in identifying specific types of activities, particularly childcare. To be able to record simultaneous activities, the length of the time interval used in the instrument needs to be considered. The decision as to which of the simultaneous activities is primary is better made by the analyst than by the respondent.

15. The range of background variables to be included also generally depends on the analytical objectives. A minimum list of variables defined in relation to basic tables on time use includes: age, sex, marital status, household composition, and work situation. Collecting information on household durables is needed for explaining time-use patterns of activities that are related to their presence or absence in the household. Whether and how to collect information about wage rates and/or household income or expenditure or simply indicators of wealth and circumstances will depend on the main objectives of the survey. The extent to which it will be meaningful to identify separately different jobs for the same individual will need to be explored. When formulating questions to be included in the time-use survey, one should, wherever relevant, draw on those already in use in the statistical system to make comparisons possible and benefit from the methodological experiences gained.

16. The three-step diary approach, wherein the interview sequence starts with an initial short sequence of questions before starting the diary and ends with the background questionnaire, should be tested.

Methods of data collection

17. Decisions on the method of data collection are influenced by combinations of factors including survey objectives, the level of literacy of the population, and

resources. In particular, the face-to-face recall interview is regarded as the best method for populations with low levels of literacy. The "Guide" will present various options, discuss their pros and cons and provide illustrations of how the methods have been implemented in countries. Key procedures to minimize interviewer effects will be specified.

Survey instruments

18. Options with respect to the use of an open or fixed interval diary, the length of intervals and the interrelation of these features with other aspects of survey design will be considered. These options will be examined in the context of findings relating to the robustness of estimates of time use at the aggregate level.

19. At the minimum, pre-coded or "light" diaries should exhaust all types of activities, and total time spent reported for the pre-coded activities should total 24 hours per day.

Sampling

20. A combination of sampling theory and the structure of costs of field operations supports the option of having more than one diary per respondent. In aiming for the largest possible sample size given resource constraints, obtaining more than one diary per person and collecting diaries from more than one member of the household are better strategies than sampling more households and selecting fewer diaries per person or fewer persons per household. However, non-response can become a problem in designs specifying many diaries.

21. Ideally, diary days should be randomly selected. Experience shows, however, that this is generally not achievable but may be approximated. Operational procedures should ensure that the selection of diary days is not left to the discretion of either the interviewer or the respondent. The "Guide" will describe possible approaches as implemented by countries.

22. Given the critical importance of time sampling to the success of time-use surveys, the "Guide" will need to provide more detailed information in this section.

Processing of time-use survey data

23. The "Guide" will present the main issues related to ensuring the quality of information collected in time-use surveys. Tools and procedures for effective coding and processing will be discussed. The coding of diaries may be performed either in the field by interviewers or at a central site by coders; the optimal choice will depend on having appropriate coding tools and procedures.

24. The "Guide" will discuss standard edit specifications and quality indicators for evaluating diary data. Advice on file structures and derived variables that can facilitate the production of tables and presentation of results from the survey will also be provided.

III. Recommendations relating to the draft international classification of activities for time-use statistics

25. The general structure of the draft classification is linked to a major objective for time-use statistics in both developed and developing countries: the improved measurement of paid and unpaid work, particularly of women. A unique component of this classification is a comprehensive categorization of activities associated with household production of goods for own final use and informal sector activities. Agreed points relating to the draft classification follow.

26. The five categories (A to E) covering System of National Accounts (SNA) production and related activities need to be revised with the following considerations:

(a) Distinctions between normal working hours, overtime and extra hours may be blurred, and might be unnecessary;

(b) Activities covering "travel related to work", "seeking employment/setting up business" and "training and studies in relation to work" are separately included in each category but may not be easily classified separately into the categories.

There is also a need to provide a clear definition for institutions included under category A and guidelines for distinguishing formal employment and related activities from informal sector employment.

27. In general, the proposed three-digit level divisions within the main categories are comprehensive enough and applicable across countries; however, the proposed four-digit groups in some of the divisions need to be reviewed to determine whether they should be delineated as such.

28. The proposed classification would need to be sufficiently flexible to allow for adaptation by countries to national circumstances, as necessary. Countries may wish to present more detailed specification of some activities within the categories and divisions; moreover, they may wish to have fewer than the proposed 15 main categories for analytical purposes. Some guidance would need to be provided as to appropriate ways of collapsing the categories.

29. As a next step, countries are encouraged to test the draft classification. Testing could be achieved in two ways: for countries with existing time-use data, a sample of completed diaries could be recoded following the draft classification; and for those planning new surveys, the draft classification could be adapted for use in the coding of activities. The draft classification could be reviewed and further refined based on the results of these tests and country experiences.

IV. General recommendations/ conclusions

30. The meeting noted that the United Nations Statistics Division web site on time-use surveys published in May 2000 (http://www.un.org/Depts/unsd/timeuse) is an effective medium for disseminating information on methods and results of national time-use surveys. It recommended that papers prepared for the meeting be published on the web site.

31. The meeting concluded that the efforts of the United Nations Statistics Division to improve measurement of paid and unpaid work are an important initiative in improving time-use statistics and have provided indispensable technical direction for developing countries that are embarking on time-use studies for the first time. Given the role that the United Nations Statistics Division has played thus far in this work, the meeting recommended that the United Nations Statistics Division take on the responsibility for coordinating international work on the development of time-use statistics and urged that the coordination be

undertaken in cooperation with other agencies with an interest in this area including UNDP, ILO and Eurostat.

Notes

[a] *Report of the Fourth World Conference on Women, Beijing, 4-15 September 1995* (United Nations publication, Sales No. E.96.IV.13), chap. I, resolution 1, annex II.

Annex II

Proposed outline for the Guide to producing statistics on time use for measuring paid and unpaid work

Preface

Introduction

- A.   Objectives of the Guide
- B.   Audience and general approach of the Guide
- C.   Organization and scope of the Guide

Part one. Survey planning and operations

I.   Rationale for collecting time-use data

- A.   Features of time-use data
- B.   Uses
    - 1.   Historical and general uses
    - 2.   Use of time-use data in improving measurement of all forms of work
- C.   Objectives

II.   Overview of issues in planning and organizing data collection on time use

- A.   Sources of time-use data
    - 1.   Independent household survey
    - 2.   Time-use module in a multi-purpose household survey
    - 3.   Data items on time use within a household survey or census
- B.   Overall statistical planning and setting of priorities
    - 1.   Relating objectives, design and resources
    - 2.   Role of the consultative process involving producers, users and sponsors
    - 3.   Planning outputs and dissemination of data

Part two. Key design specifications

III. Scope of data collection

- A. Selection and specification of survey content
    - 1. Activity
        - (a) Recording activity and duration
        - (b) Classification of activities
    - 2. Context variables
        - (a) Types and uses
        - (b) Issues in collecting contextual information
    - 3. Simultaneous activities
        - (a) Uses of information on simultaneous activities
        - (b) Issues in recording and analysis of simultaneous activities
    - 4. Background variables
        - (a) Types and uses
        - (b) Issues in selecting background variables
- B. Specification of population coverage
    - 1. Statistical units for data collection and tabulation
    - 2. Age limits
- C. Recommendations

IV. Sample design

- A. Determination of sample size
- B. Sampling the reference population
    - 1. Sampling households
    - 2. Sampling household members
- C. Time sampling
    - 1. Sampling days of the week
    - 2. Allocating diary days
    - 3. Accounting for seasonal variations
- D. Recommendations

V. Survey instruments

    A.   Types of survey instruments

        1.   Time diary

        2.   Background questionnaires

    B.   Design issues

        1.   Type of time interval

            (a)   Open interval

            (b)   Fixed interval and length of interval

        2.   Method of coding of activities

            (a)   Pre-coding

            (b)   After-coding

        3.   Format

            (a)   Time diary

            (b)   Background questionnaires

    C.   Recommendations

VI. Method of data collection

    A.   Modes of data collection

        1.   Observation

        2.   Recall interview or retrospective diary

        3.   Self-completed current diary

        4.   Computer-assisted telephone interview

        5.   Experience sampling method

    B.   Design issues

        1.   Literacy

        2.   Response issues

        3.   Interviewer effects

        4.   Data quality

    C.   Recommendations

Part three. Data collection and processing

VII. Field operations

    A.   Organization of fieldwork

    B.   Quality control procedures

    C.   Strategies for enumerator training

    D.   Field coding and editing procedures

    E.   Recommendations

VIII. Data processing

    A.   Organization of data processing

    B.   Procedures for activity coding

        1.   Preparation of a coding index

        2.   Other coding tools

    C.   Data entry

    D.   Evaluation of data quality

        1.   Quality indicators

        2.   Editing and imputation procedures

    E.   Recommendations

IX. Preparation of survey outputs

    A.   Weighting and estimation procedures

    B.   Tabulation plan

    C.   Generation of key statistics and indicators

    D.   Computation of sampling variances

    E.   Recommendations

Part four. Review, dissemination and preservation of time-use data

X. Technical review of results

    A.   Review of non-response rates

    B.   Examination of item error rates

    C.   Checking for internal and external validity

    D.   Recommendations

XI. Dissemination in reports

    A.   Standard reports and publications

        1.   Types of reporting

        2.   Preparation of publications

    B.   Meta-information

XII. Other forms of dissemination and use

    A.   Issuance of unpublished data

    B.   Preparation of special tabulations

    C.   Release of micro-data

    D.   On-line dissemination and computer access to data

    E.   Obtaining user feedback

XIII. Preservation of time-use data

    A.   Maintenance of database

    B.   Archiving and documentation of data sets

Part five. Classification of activities for time-use statistics

XIV. Concepts and definitions

    A.   Activity

        1.   Episode

        2.   Duration

        3.   Analytical unit

    B.   Production boundaries

        1.   General production boundary

        2.   System of National Accounts production boundary

    C.   Institutional units in the System of National Accounts

    D.   Informal sector activities

XV.   Draft international classification of activities for time-use statistics

A.   Purpose and nature

B.   Principles

  1.   Main categories

  2.   Divisions

C.   Structure and coding system

D.   Application

E.   Relationship to other classifications

F.   Main categories and divisions of the classification

Annexes

Summary of country survey specifications

Prototype questionnaires

Suggested tables

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