

*Gender issues in the measurement of paid and unpaid work*

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

**Country Report: NIGERIA**  
**Conducting the Time-Use Survey**  
**– Nigerian Experience**

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**CONDUCTING THE TIME-USE SURVEY  
– NIGERIAN EXPERIENCE**

**BY**

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**INTRODUCTION**

Through its various interactions, formal and informal, with the users of data, the Federal Office of Statistics identified the need to know how members of the society use their time on various activities so as to appreciate the social and economic implications of their involvement in these activities. The development in International Statistics was also pointing to the need to know the profile of unpaid work of women and the need to have an economic value of this apart from the social responsibility it represents. The Federal Office of Statistics responded to both the national and international requirements by planning for the first-ever Time-Use Survey in 1998.

Conducting a survey of this nature in largely an illiterate society (51% illiteracy rate) with culturally poor sense of time poses a lot of challenge and so the only obvious thing to do was to carry out a pilot survey so as to learn from it.

To pilot this survey was relatively an easy exercise as FOS already established and ran series of surveys in an Integrated Programme. The National Survey of Households (NISH) Programme was initiated and established in 1980 under which had been the use of common sample design, use of permanent field staff, other infrastructure for survey taking and with the core survey being the General Household Survey (GHS). These infrastructures made survey

taking logistically easy and cost-effective. Planning for the survey even with small amount of budget was easy. The main survey will be taken within the Integrated programme.

The Pilot Survey has been concluded and the draft results released. Reactions from users of the product are expected before the main survey could be designed and implemented. Another constraining factor that could delay the main survey is lack of budget. The Time-Use Survey has been put on the Programme of Surveys but government has not approved budget for it, but external support for the survey could encourage government to act positively with respect to allocation of fund to the Project. Another factor to worry about is lack of executive capacity within FOS at the moment to undertake a specialized survey of this nature.

The specific objectives of TUS are:

- ! measurement of women's unpaid work
- ! to provide information for the preparation of household satellite accounts
- ! division of labour in the household
- ! changes in allocation of time to activities
- ! incidence of child labour

But the Pilot Survey had its own objectives which were to

- (a) test the adequacy of the questionnaire in terms of concepts and definitions.
- (b) Identify the practical difficulties of the administration of the questionnaire in the field.
- (c) test the field work arrangement
- (d) test the processability of the questionnaire.

The prospective users of the results of TUS are the economic and social policy people and researchers in the country. Also the results will be of great interest to the multilateral Institutions like the United Nations Development Programme (UNDP), World Bank (WB) and researchers around the world.

The pilot survey threw up results in line with the objectives namely, average time spent in different production and non-production activities and by sex, by age group, by Education and by employment status. Of course these made it possible to derive incidence of child labour and informal sector activities and employment. (Please see draft report of the Pilot Survey).

## **SURVEY DESIGN OF THE PILOT STUDY**

As already indicated above, the pilot study was made part of the General Household Survey (GHS), the core survey of NISH. The pilot study made use of the same frame of the GHS but a sub-sample of the GHS sample and in a way a module in the integrated programme. This approach saved a lot of money and time. It was conducted in 5 states of the Federation where survey organizations already existed and we have use of permanent field staff. Again this made the survey easily doable in terms of logistics and cost. Without this survey infrastructure on the ground, it would have been impossible to carry out the exercise. The cost of the exercise was probably under ₦200,000 (two hundred thousand naira) an equivalence of about US \$2000 dollars. But this did not include the pay of Enumerators and Supervisors who normally were on the payroll of the organization.

Also in order to take account of day-to-day variations in activities and allocation of time to the activities, data was collected each day of a 7-day reference week. Data collection method was by self-completed diary and recall interview. The main instrument used for data collection consisted of three parts:

- (i) Household identification/composition required to record information on some demographic characteristics of household members.
- (ii) Household Diary (simplified time diary) Record – used for providing a diary of activities which household members spent time on during the reference period,  
and

- (iii) Use of time summary schedule – a schedule used for summarizing, on daily basis, time spent by household members age 10 years and above over various activities by major activity groupings. (see attached)

The survey collected information on simultaneous activities and the draft report indicated this practice. Questions were asked as to whether time spent on some activities was to earn some income or not. The entire 7 days of the week were covered for all households but measuring seasonal variation was not possible because it was a single short survey. The main survey could be designed to measure seasonality as the sample in the Integrated design could be spread over one year since we have permanent field force.

Private households were selected from the GHS sample and all eligible members were covered. Persons above 10 years was the target population because this was the cut-off age for the Labour Force Survey. A total of 100 households were anticipated in the sample out of which 93 households responded. These translated into 243 Persons in the sample. The classification of Time-Use activities was also on a pilot basis. The main survey will take advantage of the experiences of this trial UN classification and modify along the line of Nigerian peculiarities.

### **SOME COMMENTS ON THE STUDY DESIGN AND ITS IMPLEMENTATION**

In the following paragraphs, we make some comments on the study design and possible implications for such an exercise in the future.

#### **(a) Recording Procedure:**

Although allowance was made for self-reporting by respondents, the pilot experience indicated that the face-to-face interview using the recall method was the procedure largely used during the survey. Even among the literate population, diaries were left uncompleted until the interview came round to monitor progress of work. The reason generally given was lack of time. This has implication for the main survey especially both in terms of the method to be adopted and number of interviews that can

conveniently be handled by the interviewer. For the current study, an interviewer handled 5 households and on the average 12 interviews per day. This looked a reasonable workload for an interviewer to handle more so when the recall method is adopted. In other words, for efficiency and collection of quality data, an interviewer should not be made to cover more than 5 households using the recall method.

(b) **Structure of Diary :**

The form of the structure of the diary was duly considered while the questionnaire was still in the draft stage. The initial plan was to have a fixed time diary in intervals of 30 minutes. However, considering that the population does not keep time and coupled with the use of the recall method in collecting the data, it was agreed that the open format diary should be used. This worked to the extent that the informants were asked to account for activity in recalling major activities and approximate time taken to complete these activities. However, there were instances of some unaccounted time, usually of short duration. With further probing, the gaps were accounted for or reduced.

A issue that was raised while debriefing the trainers at second level was the accuracy of duration or time taken to perform an activity. This can not be determined from the study. It will require further research in which both the observation and recall methods are employed to account for use of time.

Another problem associated with the use of the recall method was that of getting children to account for how they used their time. Sometimes adult members of the household had to come to their assistance in order to have a complete picture of how they used time. It would have been better to get the children account for use of their time themselves. This situation must be addressed in the main survey.

(c) **Unit of Recall:**

The use of a 7-day week rather than just one day adopted in order to account for day-to-day variations in activities as well as time taken in carrying out these activities. There were no difficulties in implementing it except that of response burden. Some respondents discontinued the interview after the first 2 or 3 days while some wanted to be compensated before further cooperation could be assured.

(d) **Data Collection:**

Four main data collection tasks were undertaken during the fieldwork, viz.:

- collection of socio-demographic data
- recording activities and times taken to complete/perform them.
- Coding activities using UN's Trial Classification for Time-Use Activities.
- Summarizing activities at the 1-digit level.

The first was more or less a routine task for the field staff and presented no difficulties.

Two main problems were reported while recording time-use activities. Partly because of the use of the open format diary and partly because the recall method adopted, there were instances where some informants did not account for all the 24 hours in a day. Further probing had to be done to have the full account.

The other problem arising from the recording of activities was the lumping of activities together. This is however viewed as an interviewer's problem rather than informant's. During the training, interviewer were told to ensure that activities were not lumped together. Failure to do so created both coding and classification problems. More attention will have to be devoted to this during the main survey in order to forestall the occurrence of this problem.

Another problematic area during data collection was that of coding of activities. There are two dimensions to the problem. The first was that of miscoding of uniquely identified activity, which led to misclassification of the activity. These situations were manually resolved through the application of the “Trial International Classification for Time-Use Activities” although at a cost (time). The second and the more serious dimension to the problem occurred where activities were lumped together. This presented analysis problem at the 2-digit level but not at the 1-digit level. The problem created at the 2-digit level was not that it became near impossible to disentangle the lumped activities both in terms of the activities and time used.

Majority of the coding problems and the lumping of activities were usually done within the 1-digit level rather than between and current analysis was done at the one digit level only. The story would have been different if analysis had been done at the 2-digit level. Nonetheless, these problems underscore the importance of adequate training, effective supervision and other quality assurance measures prior to, during and after fieldwork.

(e) **Training :**

Only one day was devoted to training. With benefit of hindsight, the 1-day was inadequate to cover the training programme which included how to

- complete the time-use questionnaire using the instruction manual
- use the schedule of “Trial International Classification of Time-Use Activities
- assign 2-digit level codes to time-use activities
- summarize time-use activities from the 2-digit level to 1-digit level, and
- edit completed questionnaires.



Although all the above tasks were covered during the training, more time would be required to do justice to their treatment especially during practice sessions on coding, data editing and summarization.

It is also to be noted that there was no field practice during the training which could have brought to the fore some of the problems later encountered during the fieldwork and data processing. In actual fact, the complexity, newness of the survey and the large number of field staff to be used in the main survey will necessitate that more days be earmarked for the training.

(f) **Data Processing:**

Once the question of misclassification of activities had been manually resolved, no further problem was encountered during the data processing. The EPI-Info proved adequate for data entry and processing.

(g) **Data Analysis:**

Two main sets of indicators were computed for proper understanding of the use of time:

- (i) Specific average duration of an activity
- (ii) Participation rate i.e. impact of specific activity on a given population.

The EPI-Info was also used in obtaining these indicators with minimal manual calculations. While there was no difficulty in obtaining the specific average duration of an activity, the second presented some problem. The problem arose from the fact that not all the respondents participated in all activities and where they did, they did so with varying degree of frequency during the reference week. In order to compute the participation rate, a person was assumed to have participated in an activity if he/she participated at least once in the week. With this definition, a new variable was created and values assigned according to whether the respondent participated at least once in the week or not. The process of assigning these values was labourious and inefficient and

underscore insufficient technical expertise in dealing with this situation using the EPI-Info.

**TABLES GENERATED:**

The following is a summary of the tables presented along with this report. The tables are however by no means exhaustive. For example, Tables 7a, 7b and 7c present some data on child labour within the age bracket 10 - 14 years.

**Production Activities:** (within SNA production boundary)

Table 4a: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Production Activities by Persons Age 10years or over by Gender, HH Headship, State, sector, Marital Status and Religion.

Table 4b: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Production Activities by Persons Age 10 years or over by Education, Literacy Level, Age-group and Employment Status.

Table 4c: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Production Activities by Persons Age 10 years or over by Day of the Week, Weekdays and Weekends.

**General Production Activities** (using 3<sup>rd</sup> person criterion)

Table 5a: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of General Production Activities (using 3<sup>rd</sup> Person Criterion) by Persons Age 10 years or Above by Gender, HH Headship, State, Sector, Marital Status and Religion.

Table 5b: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of General Production Activities (using 3<sup>rd</sup> Person Criterion) by Persons Age 10 years or Above by Education, Literacy Level, Age-group and Employment Status.

Table 5c: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of General Production Activities (using 3<sup>rd</sup> Person Criterion) by Persons Age 10 Years or Above by Day of Week, Weekdays and Weekends.

### **Non-Production Activities**

Table 6a: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Non-Production Activities by Persons Age 10 years or Above by Gender, HH Headship, State, Sector, Marital Status and Religion.

Table 6b: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Non-Production Activities by Persons Age 10 years or Above by Education, Literacy Level, Age-group and Employment Status.

Table 5c: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Non-Production Activities by Persons Age 10 Years or Above by Day or Week, Weekdays and Weekends.

### **Child Labour** (within the Age bracket 10 – 14 years)

Table 7a: Percent Distribution of Children Age 10 – 14 years by Gender, Sector, Marital Status and Education.

Table 7b: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of Non-Production Activities by Persons Age 10-14 years by Gender, Sector, Education, Religion and HH Headship.

Table 7c: Average Time (in Hours) Per Day and Participation Rates (%) in Major Groups of General Production Activities (using 3<sup>rd</sup> Person criterion) by Persons Age 10-14 years or Above by Gender, Sector, Education, Religion and Household Headship.

So far the results of the Pilot TUS has been for Internal use only particularly by the National Accounts Division and a copy of the draft report had been sent to the UN Statistical Division in New York.

## **CONCLUSION**

There is no doubt about the usefulness of the TUS and how the results could be used to formulate policies that will benefit the society. Therefore the main survey should be done with a sense of urgency. Government and International Agencies should endeavour to collaborate.

It is also a real challenge to undertake TUS in developing countries. Features of the TUS exercise should be painstakingly studied so as to establish workable methods in collecting data on time-use.