

**REPUBLIC OF GHANA
STATISTICAL SERVICE**

**GHANA LIVING STANDARDS SURVEY
(WITH LABOUR FORCE MODULE)**

DATA ENTRY OPERATOR'S INSTRUCTION MANUAL

DATA PROCESSING SECTION

(March 1998)

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TABLE OF CONTENTS

PART 1.....	1
1 INTRODUCTION.....	1
OBJECTIVES OF THE SURVEY.....	1
METHODOLOGY OF THE SURVEY.....	3
SURVEY PERIOD.....	3
QUESTIONNAIRE.....	3
ORGANISATION OF THE SURVEY.....	4
THE PROJECT DIRECTORATE.....	4
DATA COLLECTION AND ENTRY TEAMS.....	5
PART 2.....	6
WORKLOAD OF DEOS.....	6
INSTRUCTIONS ON WORKRATE.....	6
PART 3.....	7
FOURTH ROUND DATA ENTRY SYSTEM.....	7
3.1 INTRODUCTION.....	7
3.2 Getting Started.....	8
3.2.3 Taking Backups of Batches.....	9
3.2.4 Labelling your Diskette.....	9
3.3 Use of Function Keys in Data Entry Mode.....	10
3.3.2 MODIFY BATCH.....	11
3.3.3 VERIFY Batch.....	13
PART 4.....	16
MAIN TASKS OF DATA ENTRY OPERATOR.....	16

PART 1

1 INTRODUCTION

Despite the successes of the structural adjustment programme being implemented by the Government to strengthen and rehabilitate the economy of Ghana, there are high social costs. The monitoring and evaluation of these costs on sub-groups of the population are therefore essential for planning suitable compensatory programmes for those adversely affected. This implies that the necessary data must be available for such purposes.

Since the Ghana Living Standards Surveys (GLSS) is an extensive survey and detailed in its coverage of various topics, it serves as a good basis for in-depth analysis of living standards in the country and lends itself to the monitoring, evaluation and analysis of poverty in its various ramifications.

Poverty alleviation have been identified as a focal point of government policy and programmes. In addition to poverty alleviation is the issue of labour information systems (employment and unemployment) etc. data on continuous basis consequent on the Structural Adjustment Programme (SAP) launched as a component of the Economic Recovery Programme (ERP). The emergence of vulnerable groups as a result of the implementation of SAP calls for a clearer identification and composition of these groups, and monitoring of their performance over a period of time.

Existing surveys on employment and earnings do not allow the generation of comprehensive labour market statistics (including trends in unemployment, the number of people looking for work, and the number of self-employed workers) that could provide a monthly or annual snapshot of the activities of the country's population of working age. Policy-makers, business persons, and academic analysts need more expanded information for purposes such as evaluating living standards and conditions of work and the labour force, especially that engaged in the informal sector of the economy. Therefore, the need for the fourth round of the GLSS with a labour force module is paramount.

OBJECTIVES OF THE SURVEY

The survey had the following objectives:

- * To provide information on patterns of households consumption and expenditure at a greater level of desegregation.
- * To serve as the basis for up-dating the National Accounts In combination with earlier data from the GLSS to give a data base for national and regional planning and for the estimation of consumption as a proportion of household production.

- * To give an in-depth enquiry into the structure and distribution of wages and conditions of work of the country's labour force.
- * To provide comprehensive benchmark data for use in the compilation of current statistics on average earnings, hours of work, and time rates of wages and salaries so as to indicate wage/salary differentials between branches of industry, geographic regions, occupations and the sexes.

To achieve these objectives, in-depth data will be collected on the following key elements:

- Demographic Characteristics
- Health and Fertility Behaviour
- Education and Skills/Training
- Employment and Time Use
- Housing and Housing Conditions
- Household Income, Consumption and Expenditure.

Also to be compiled are statistics on:

- i) Establishments by size and type of labour employed
- ii) Educational background and skills of the labour force
- iii) time use; job characteristics, hours of work, activity status and Employment search, employment history
- iv) Establishment practices with respect to wages/salary, payment schedules, shift operations, payments for overtime, incentive bonuses, and contributions to pension and social security schemes.

The information gathered from this survey would generally aid decision makers in the formulation of economic and social policies to,

- ◆ Identify target groups for government assistance
- ◆ Construct models to stimulate the impact on individual groups of the various policy options
- ◆ Analyse the impact of decisions that have already been implemented and of the economic situation on living conditions of households and
- ◆ To monitor and evaluate employment policies and programmes, income-generating and maintenance schemes, vocational training and other similar programmes. The joint measurement of employment and income provides the basis for analysing the adequacy of employment of different categories of workers and the income-generating capacity of employment-related economic hardships.

User agencies such as the National Development Planning Commission (NDPC), the Ministry of Finance and Economic Planning (MFEP), Ministry of Education, District Assemblies and the general public will greatly benefit from the survey.

METHODOLOGY OF THE SURVEY

It is proposed to study about 6,000 households in 300 EAs (193 rural and 107 urban) in order to achieve the survey objectives. The sample design follows the methodology adopted for the third round of the GLSS with minimal modification. It is expected that about 30,000 household members will be covered (based on 20 households per EA with an average household size of 5 persons). There will be an additional 5 replacement households for each EA. Each selected Household will be visited a total of 7 times in a cycle (At 5 days interval). Specific portions of the questionnaire will be covered on each visit.

SURVEY PERIOD

The survey will cover practically the whole year in order to ensure a continuous recording of household consumption and expenditures and changes occurring thereof.

Eleven teams will be involved in the data collection. The purpose of the eleventh team is to afford each of the 10 regular teams the opportunity to take 1 month off as annual leave. The leave arrangements will be such that there will always be 10 teams at work.

QUESTIONNAIRE

One household questionnaire divided into parts A and B will be administered. Features of the questionnaire and precautions that have been taken to ensure that good quality data are collected and processed without delay include the following:

- * The questionnaire is almost entirely pre-coded. This obviously eliminates the very slow and tedious coding process which is often liable to various types of errors.

- * Microcomputers are installed in all data collection centres located in regional offices of the Statistical Service. This is to facilitate the quick entry of data close to the points of data collection.

- * A software programme has been designed to check the data automatically to detect inconsistencies so that any errors can be corrected by the interviewer in consultation with the supervisor.

- * Supervision will be close with one supervisor to a team of four interviewers and one data entry operator. One interviewer will stand by for emergency relief.

- * Two types of skips have been used in the questionnaire:

Answer specific skips, listed directly under the answer and enclosed within brackets

e.g. (>> 6).

Skips that apply after a question, regardless of the answer and printed in capitals in a box at the bottom of the question, e.g.

>> PART D

In addition to the above mentioned questionnaires there will be at least one each of COMMUNITY and PRICE questionnaires for each EA.

ORGANISATION OF THE SURVEY

The Ghana Living Standards Survey (with Labour Force module) is being conducted by a Project Directorate which is assisted by a staff of technical officers, and ten data collection and entry teams based in the regional offices of the Statistical Service.

A microcomputer is installed in these regional offices for the immediate entry of data from all questionnaires that may be completed by each team. Accra and Kumasi will have two computers each.

THE PROJECT DIRECTORATE

The Project Directorate is composed of:

i) The Project Technical Coordinator: He is responsible for the administration of the survey; implementation of its broad guidelines, direction of the work of the Directorate; authorising expenditures; and making the necessary contacts for the smooth running of the project. He is generally responsible to the Government Statistician, who is the Project Director for the conduct of the survey.

ii) The Survey Manager (Interviews) acts as Assistant to the Project Technical Coordinator in the conduct of the survey. He trains interviewers, keeps in touch with the survey teams and sees to it, by frequent visits to the field, that instructions for completing the questionnaires are followed. He must be ready to give prompt and appropriate solution to any technical or other problems that may arise in the field.

iii) The Survey Manager (Data Entry/Processing) is responsible for the design of the data entry software and data processing programmes. He is to ensure that all supervisors and data entry operators follow all instructions for running the programmes and for the efficient use of the microcomputers.

iv) Project Assistants: One of these is responsible for Data Processing and the others for interviews. They assist the Survey Managers in their duties.

The Project Directorate is assisted by a staff of technical officers. The most senior assists in the administration of the secretariat while the others are stand-by supervisors.

* The Project Directorate will pay periodic surprise visits to the teams in the field.

DATA COLLECTION AND ENTRY TEAMS

There will be 11 data collection teams. The constitution of a team is shown below:

- 1 Supervisor
- 4 Regular Interviewers
- 1 Data Entry Operator
- 1 Driver

The Supervisor is the team leader and is responsible for overseeing, monitoring, and where necessary, correcting the work of the interviewers and the data entry operator. In addition he is responsible for managing the team's equipment, vehicle and funds. He also represents the Project Director at the regional level. The duties of the Supervisor will be taken over by a Senior Interviewer who will be selected (by the GLSS Secretariat) from the 4 interviewers in the team. The senior interviewer will conduct his/her normal interviews and only assume the role of the supervisor when the latter is not available, e.g. when he/she is indisposed.

The interviewers conduct daily interviews with the households. To avoid any interruption in the survey schedule, 3 interviewers are always at work while the 4th take some rest.

The data entry operator is responsible for entering the data collected from the field onto a microcomputer.

The driver drives the team from the regional office to the place where the survey is being carried out.

PART 2.

WORKLOAD OF DEOs

When a team (rural or urban) begins work in every EA, the DEO will have the following tasks to perform:

- a) Part A: At the beginning of the 4th visit in an EA, you will receive a set of 20 questionnaires with data covering sections 1-7. These should be completely entered by the close of the 7th visit and submitted to the team supervisor together with their corresponding printouts.
- b) Part B: Again you will receive 20 questionnaires with data covering the remaining sections (8-12) at the beginning of the first visit in the next EA and should be completely entered by the close of the 3rd visit and submitted to the team supervisor together with their corresponding printouts.
- c) By the close of the 4th visit in the next EA you should have completed all corrections in the previous EA as directed by the supervisor and should have taken at **least one (1) backup** of each **BATCH**.
- d) Part C: This comprises of Community Questionnaire(s) and Prices Questionnaire(s). There could be more than one Community or Price Questionnaire in an EA. These should be entered before the interviewer leaves the specific EA.

INSTRUCTIONS ON WORKRATE

- * Workload: - You have fifteen (15) days to complete data entry on 60 questionnaires in Part A, fifteen (15) days in Part B and at least a questionnaire each on Parts C (Community Questionnaire) and D (Prices Questionnaire). This includes time for printing, backups and corrections detected in questionnaires already keyed in.
- * Rate of Data Entry: - Each DEO should enter **at least** four (4) questionnaires a day for part A and four (4) per day for part B.
- * You should always place the printout of every household in its corresponding questionnaire.
- * You will have a total of 9 diskettes for each EA; (i.e. 3 backup diskettes each of parts A, B and C - D). **Note**: Part C and Part D can go onto one diskette. **Two** of each part is to be sent to the Head Office, Accra from time to time. The remaining copies are to be kept safely by the DEO.

PART 3.

FOURTH ROUND DATA ENTRY SYSTEM

3.1 INTRODUCTION

The Data Entry System for the preparation of data collected on the fourth (4th) round GLSS household questionnaire was developed on the Integrated Microcomputer Processing Systems (IMPS) Ver. 3.1 software package.

The operation of this data entry system has been explained using the microcomputer.

The following terminologies used in this system should be well noted:

(a). **JOB**: A job is simply a data entry application or program. In your case there are four data entry programs or jobs; one for each of the four of the survey questionnaires.

The jobnames or data entry program filenames are:

- * GLSSPTA ... for PART A - sections 1 to 7
- * GLSSPTB ... for PART B - sections 8 to 12
- * GLSSPTC ... for the COMMUNITY questionnaire
- and * GLSSPTD ... for the PRICES questionnaire.

(b). **FORMAT**: A format is a screen displayed by a job. It defines the information on the screen, the input data fields, and the layout of the output record. A job may have one or more formats of the same or different number of fields.

In your case the job;

- GLSSPTA ... has thirty-seven (37) formats or screens
- GLSSPTB ... has forty-two (42) formats or screens
- GLSSPTC ... has twenty-seven (27) formats or screens
- GLSSPTD ... has four (4) formats or screens

(c). **BATCH**: A batch is a set of questionnaires from one enumeration area (EA). Questionnaires would be entered in batches, and each batch would have a unique file name. The naming of batches are to follow this procedure:

Zrrddxxx

Where **Z** could either be A, B, C or D representing PARTS A, B, C or D **RESPECTIVELY**

rr - is the region code

dd - is the district code and

xxx - represents the EA number.

E.g. A0118321

This is a Batch file name of **PART A** questionnaires for the region 01 and district 18 and EA number 321.

E.g. B0210221

This is a Batch file name of **PART B** questionnaires for the region 02 and district 10 and EA number 221.

E.g. C0210221

This is a Batch file name of **PART C** questionnaires for the region 02 and district 10 and EA number 221.

E.g. D0118321

This is a Batch file name of **PART D** questionnaires for the region 01 and district 18 and EA number 321.

Batch files have the extension **BCH**

E.g. D0118321.BCH

3.2 Getting Started

3.2.1 To Enter Data Entry Mode

At the **C prompt (C:\>)** type **GLSSPTA** (To enter data for **part A**) or **GLSSPTB** (to enter data for **part B**), **GLSSPTC** (To enter data for **community questionnaire**) and **GLSSPTD** (To enter data for **prices questionnaire**).

E.g. C:\>GLSSPTB
and press <ENTER>

**This command brings up the data
entry screen for Part B questionnaire.**

3.2.2 Preparing a fresh Diskette

You have to prepare a fresh empty diskette to copy batches of Part A and Part B from the hard disk. This is a means of making backups of batches.

You will use the FORMAT Command to prepare new and empty diskettes. You will format only the new diskettes given you. Note that information or data on diskettes formatted are destroyed.

FORMAT: - Enables you to prepare a new diskette to store information.

To format a new diskette

- (a). Insert the new diskette in drive A
- (b). At the C:\> prompt, type

Format A:
and press <ENTER>

NOTE!!!!:- You must get this right. Never EVER FORMAT the C drive.

Note

- 1. You are prompted if you want to format another diskette. (Y/N). To format another diskette: Insert a new diskette in drive A and type Y. Type N to exit format operation.
- 2. At the end of the format operation, **TYPE SCANDISK A:**
and press <ENTER>
if there are bad sectors, do not use the diskette.

3.2.3 Taking Backups of Batches

When data entry together with corrections for a particular EA have been completed, you must take a backup or make a copy of the original data you have entered for that EA, using the **COPY** command.

COPY: - Enables you to duplicate one or several files, from one place to another.

e.g. To copy a BATCH file onto an empty diskette:

a. Insert the diskette in drive A.

b. Type COPY C:\glss4\work\<Batchname.BCH> A:
and press <ENTER>

(Make THREE copies of each Batch)

e.g. COPY C:\ GLSS4\WORK\A1010100.BCH A:
and press <ENTER>

Where **A1010100.BCH** is the batch file being copied

3.2.4 Labelling your Diskette

You must label the diskettes using the felt pens provided as follows:

EXAMPLE

<DEO Id>	12/01/98
(BATCHNAME)	

Like the above illustrated label, you should supply the following information:

- The Batch file name;
- Date on which "Batch" was prepared.
- ID of Data Entry Operator.

3.3 Use of Function Keys in Data Entry Mode

3.3.1 ADD to Batch

i) TO ENTER A FIELD:

0-9	= enter digits
Space bar	= erase field
DEL	= erase field
Backspace	= erase field
* (Numeric keypad)	= DUP field from previous record

ii) TO MOVE AMONG FIELDS:

Enter	= go to next field
- (Numeric keypad)	= go to previous field
®	= Go to next field (numeric only)
↶	= Go to previous field (numeric only)
+ (Numeric keypad)	= skip to pre-defined field

iii) TO MOVE AMONG SCREENS:

PgDn	= go to next screen in quest
PgUp	= go to previous screen in quest
Home	= go to first screen in quest
End	= go to last screen in quest

iv) TO MOVE AMONG RECORDS:

/	= Go to next record
Tab	= go to next record type
F5	= Choose next record type from menu
Ctrl-F5	= Choose next record type (enter value)

v) TO INSERT/DELETE RECORD:

F3	= Insert record before current record (then F5 to choose record type)
Ctrl-F3	= Insert after current record (then F5 to choose record type)
F4	=Delete current record

vi) TO EXIT THE QUESTIONNAIRE:

F7	=End questionnaire
Esc	= Cancel questionnaire

3.3.2 MODIFY BATCH

i) TO ENTER A FIELD:

0-9	= enter digits
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Space bar	= erase field
DEL	= erase field
Backspace	= erase digit
*(Numeric keypad)	= DUP field from previous record

ii) TO MOVE AMONG FIELDS:

Enter	= go to next field
- (Numeric keypad)	= go to previous field
®	= Go to next field (numeric only)
¬	= Go to previous field (numeric only)
+ (Numeric keypad)	=skip to pre-defined field

iii) TO MOVE AMONG SCREENS:

PgDn	=go to next screen in quest
PgUp	=go to previous screen in quest
Home	=go to first screen in quest
End	= go to last screen in quest

iv) TO MOVE AMONG RECORDS:

/	=Go to next record
Tab	= go to next record type

v) TO MOVE AMONG QUESTIONNAIRES:

F6	= find questionnaire
Ctrl-F6	= find next questionnaire

Note: * matches any character in an F6, Ctrl-F6 search

Ctrl-PgDn	= go to next questionnaire
Ctrl-PgUp	= go to previous questionnaire
Ctrl-Home	= go to first questionnaire
Ctrl-End	= go to last questionnaire

vi) TO INSERT/DELETE RECORDS:

First, move to the appropriate record screen; then:

F3	= Insert record before current record (then F5 to choose record type)
ctrl-F3	= Insert record after current record (then F5 to choose record type)
F4	= Delete current record

vii) TO INSERT/DELETE QUESTIONNAIRES:

First, move to the appropriate questionnaire screen; then:

F3	= Insert quest before current quest
F4	= Delete current quest

viii) TO FIND RANGE ERRORS:

Press <ctrl-E> to search forward for the next field in error

ix) TO EXIT THE QUESTIONNAIRE:

F7	= Write changes to disk
Esc	= Exit quest (cancel Changes)

3.3.3 VERIFY Batch

i) TO ENTER A FIELD:

0-9	= enter digits
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Space bar = erase field

DEL = erase field

Backspace = erase digit

***(Numeric keypad)** = DUP field from previous record

ii) TO MOVE AMONG FIELDS:

Enter = go to next field

-(Numeric keypad) = go to previous field

® = Go to next field (numeric only)

¬ = Go to previous field (numeric only)

+ (Numeric keypad) = skip to pre-defined field

iii) TO MOVE AMONG RECORDS:

/ = Go to next record

iv) TO MOVE AMONG QUESTIONNAIRES:

F6 = choose & go to unverified quest

Ctrl-F6 = choose & go to next unverified quest

NOTE: * matches any character in an F6, Ctrl-F6 search

Ctrl-PgDn = go to next unverified quest

Ctrl-PgUp = go to previous unverified quest

v) TO EXIT THE QUESTIONNAIRE:

F7 = Exit partially verified questionnaire

Esc = Exit partially verified questionnaire

vi) TO ENTER/EXIT
F2

PART 4.

MAIN TASKS OF DATA ENTRY OPERATOR

The data entry operator essentially has two major tasks:

- * entry of data from the questionnaires and
- * management of computer hardware and documents.

Entry of data from the questionnaires consists of entering all data from the questionnaires into the appropriate subdirectory and correcting all errors in the data entered.

Management of computer hardware and documents consists of properly maintaining the microcomputer and printer and storing the questionnaires, diskettes and printouts.

Management of computer Hardware

To prevent the rapid deterioration of the delicate and costly computer and printer, you must ensure that:

- the office doors and windows are to be kept shut to prevent dust;
- You turn off the computer and printer at the end of each work period;
- You protect your computer and printer clean from dust by covering them with the covers designed for them before leaving;
- You handle your computer and printer with care. You must not allow anyone to use them.

Management of materials

The materials are diskettes, printouts and questionnaires.

These materials should be put in order by EAs and within a given EA, by household number to make the identification of documents easier.

Submission of diskettes, printouts and questionnaires

You will submit to your supervisor:

(a). 6 diskettes - 2 of Part A , 2 of Part B and 2 of Parts (C and D)

***** (b). 20 questionnaires per EA. Each questionnaire should contain one printout.

Remarks:

Your supervisor will verify the data entered from the questionnaires by checking your printouts. He will make all necessary corrections and also ascertain that the diskettes you have submitted correspond to the questionnaires.

All corrections that the supervisor wants you to effect will be written in red on the "printout". He will circle the data to be re-entered or indicate lines that should be deleted or added.

Organising your work at the office.

You should make the best possible use of the small amount of space allocated to you. That is, everything must be kept in the proper place.

For instance,

- * The computer and printer must be put on the table.
- * The diskettes, questionnaires and printouts must be tidily stored in the cabinet.

Computer Breakdown.

If, despite all the precautions described above, the computer breaks down, you should report to your supervisor who will in turn inform the Project Directorate in Accra. You should **never** try to repair the computer yourself.

You are strictly forbidden to dismantle the central processing unit, the monitor, or even the printer.

You should however be certain that you really do have a computer breakdown and not a defect in the electrical supply (incorrect plugging, power failure, short circuit, etc.) or faulty procedures you may be using to prevent unnecessary worries.

If your machine breaks down when your supervisor is far in the field then you should immediately call the staff in Accra. The appropriate person to call is the project's Data Processing Manager (telephone Accra 665441 Ext. 6417 or 6419 or 664381) but if he is not available, you may contact other offices at the secretariat on extension 6397, 6473 or 6395.