

23RD SEPTEMBER, 2004



REPUBLIC OF GHANA

2003 NATIONAL INDUSTRIAL CENSUS

PHASE II ENUMERATOR'S MANUAL

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FOREWORD

Enumerator training for the 2003 National Industrial Census comprises this manual, a training course, and field supervision.

This manual is designed to support both formal and field training. You are urged to use it well. In particular, read the relevant sections prior to attending training sessions and refer to it frequently in the field.

The manual is based on field experience gained in Phase 1 and in the pilot to phase II of the Industrial Census, and takes account of the UN Statistics Office Recommendations for the World Programme of Industrial Statistics.

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INDUSTRIAL CENSUS COORDINATOR

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CHAPTER 1

INTRODUCTION TO THE INDUSTRIAL CENSUS

1.1 PURPOSE

The purpose of the 2003 Industrial Census is to obtain an up to date accurate description of industry in Ghana. Such a description is necessary in order that plans and decisions to improve productivity can be made. Increased productivity is important to raise living standards. The main objectives of the census are to:

- a. obtain data on production and employment as a basis for government and business decision making;
- b. provide data for revising and updating the Statistical Service's Annual Survey of Industry and other economic series;
- c. measure the contribution each industry and region makes to Ghana's employment and production;
- d. obtain internationally comparable data on the structure and activity of industry.

1.2 CONFIDENTIALITY

We wish at the beginning of this manual to emphasize the confidential nature of your work as an enumerator. The success of a census depends on the willingness and cooperation of the respondent. This in turn depends to a large extent on whether the respondent believes the information he gives will be kept confidential.

As an enumerator you must know the provisions made by the industrial census organization to keep information confidential. In this manual the subject of confidentiality will be raised several times. Study these passages carefully. Listen attentively to what your instructors have to say about it. Resolve from the onset that you will in no way breach the confidentiality provisions.

1.3 SCOPE AND COVERAGE

1.3.1. Industrial Scope:

The census covers establishments primarily engaged in mining and quarrying, manufacturing, construction and the production and distribution of electricity, gas and water. The census does not include establishments primarily engaged in repair and servicing, transport or retail activities or exploration of minerals. Own account construction is also excluded.

1.3.2 Size Coverage

All 'in-scope' establishments engaging 10 or more persons will be covered. A sample of establishments engaging less than 10 persons will also be covered. Household based industries will not be covered.

1.3.3. Geographical Coverage

The whole of Ghana is covered. However, establishments employing ten or more persons are mostly found in the larger towns.

1.4 GENERAL PLAN OF THE ENUMERATION

Enumerators are to visit establishments covered by the census and either assist the respondent to complete the questionnaire, or leave the questionnaire with the respondent and make an appointment to pick it up. In each case the enumerator must carry out accuracy and completeness checks before leaving the establishment. Enumerators are responsible for ensuring that all establishments on the list of their enumeration zone are enumerated. They are also responsible for making a field summary of the completed questionnaires.

1.5 LEGAL AUTHORITY

The census is being conducted under the Statistical Service Law 1985 (PNDC Law 135) which empowers the Government Statistician to conduct the industrial census.

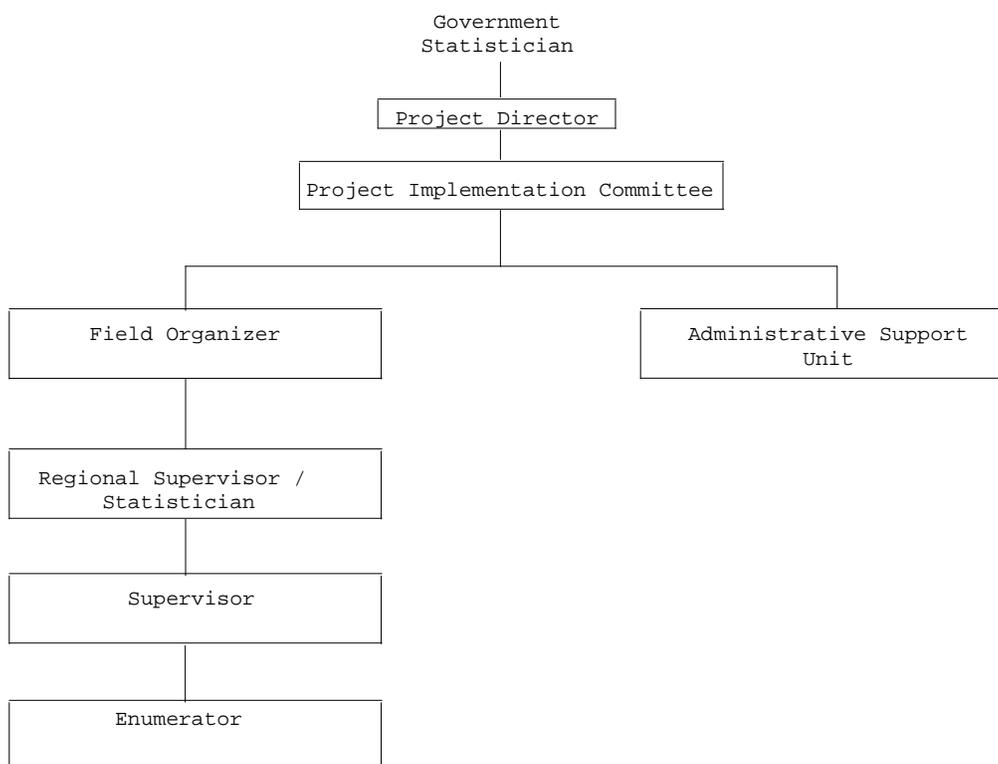
1.6 CENSUS ORGANISATION

The census is planned and organized by the Industrial Statistics Section of the Ghana Statistical Service. The industrial census organization which is headed by the Government Statistician is composed of three major units. They are:

- Design and Data processing
- Field Operation
- Administration

1.7 CENSUS FIELD ORGANISATION

The field organization, of which you are a vital part, is as follows:



1.8 FIELD STAFF

- **Field Monitoring Staff**
The monitoring staff from the Industrial Census Secretariat will visit the field staff in the regions to ensure that quality work is being done and also to help address problems which the field staff may encounter. They will also act as liaison officers between the Regional Statisticians and the Census Secretariat.
- **Regional Statistician**
The Regional Statistician will be responsible for the overall supervision of the census in his/her region. He/she will provide administrative support to the census. In particular, he/she will assist the supervisors in dealing with difficult establishments, make payments and provide transport and communication link with the Census Secretariat. In addition, the Regional Statistician is to ensure that the work is completed on schedule in his/her region. It

is also the responsibility of the Regional Statistician to collect completed questionnaires from establishments that may delay in submitting their questionnaires within the stipulated time.

- **Supervisor**

The supervisor, whose task is to supervise the enumerators in his/her team, will report to the Regional Statistician. He/she will assign work to his/her enumerators, observe their interviewing techniques, and also edit completed questionnaires received from them. He/she will also assist the enumerators with problems that may occur including uncooperative respondents.

- **Enumerator**

An enumerator is assigned to each enumeration zone. He/she visits all the establishments in his/her zone, explains the purpose of the census, gives assistance with the questionnaire, reviews the questionnaire for completeness and accuracy and obtains any additional information that may be necessary. He makes a field summary for his enumeration zone.

1.9 CENSUS PROCESS

The census is conducted in two phases. In phase I we identified in-scope establishments and described them in terms of a few characteristics.

In phase 2, we will visit all establishments engaging more than 10 persons and a sample of establishments engaging less than 10 persons and collect detailed economic information. All construction establishments will however, be covered irrespective of size. From each establishment, detailed economic information will be collected. Each phase can be considered in three stages:

1. design and preparation
2. data collection
3. data processing, analysis and publication

1.10 PREPARATORY WORK

Preparation for phase I began in the third quarter of 2002 and the data was collected in October 2003. Data processing occupied the latter part of December to March 2004 and the census secretariat is presently analyzing the data and preparing reports.

Much of the information required to plan phase II was collected during phase I. The questionnaires, manuals and table outlines were prepared in the first quarter of 2004. The census instruments (manuals, questionnaires, controls forms, etc.) were tested during a pilot in September/October 2004. Questionnaires, instructions and procedures were reviewed in the light of pilot experience. The main data collection for Phase II will begin in early December 2004 and expected to be completed by the mid-February 2005.

1.11 Census Publicity

The census is an important national undertaking. There will be census publicity before the enumeration commences. This would involve advertisements, announcements and radio/television discussions.

CHAPTER 2:

ENUMERATOR'S RESPONSIBILITIES, DUTIES AND CONDUCT

2.1 INTRODUCTION

Obtaining good quality data from respondents is crucial to the success of the industrial census. The quality of data collected depends largely on the enumerator. You must clearly understand your part and be ready to perform it well. This manual will help you understand your roles and responsibilities.

2.2 ENUMERATOR'S RESPONSIBILITIES

2.2.1 Follow Instructions

It is your responsibility to clearly understand and follow instructions on the questionnaires and in this manual. It is necessary that each enumerator asks the census questions the same way, and use identical definitions and procedures. Instructions must be thoroughly learnt and strictly followed.

2.2.2 Confidentiality

It is your responsibility to keep the information you collect confidential. Completed questionnaires must at all times be kept in your satchel, and the satchel zipped. At home, you must keep your satchel in a secure place from the reach of others.

2.2.3 You Must Complete Your Assignment

You are expected to work hard and complete the area assigned to you in good time. You will not be permitted to resign once you have started enumeration.

However, in case you become ill or incapacitated whilst working on the census you should report immediately to your supervisor so that he can arrange a replacement.

2.3 SUMMARY OF ENUMERATOR'S DUTIES

- Take the oath of secrecy
- Attend the training course and complete training assignments
- Commence enumerating your zone on the date set
- Plan your work on the enumeration planner
- Meet with your supervisor as arranged
- Record problems and comments in your field note book for discussion with your supervisor.
- Complete the enumerator's control form at the end of each interview
- Follow the instructions given to you by your supervisor
- Complete the enumeration of your zone within the allocated time.
- Compile the field summary for your zone
- Return all questionnaires and materials to your supervisor on completion of field work
- Attend the enumerators debriefing for your area.

2.4 RESTRICTIONS

2.4.1 No Other Activities During Enumeration

You are prohibited from engaging in activities such as petty trading, political or religious propaganda during the enumeration. People who are in full-time employment elsewhere cannot take part in the census without a formal release from their employers. Students who are fully engaged in educational institutions which are in session during the training and enumeration periods cannot take part in the census.

2.4.2 No Unauthorized Persons Should Help You In Your Work

You are not permitted to delegate your work to anyone. No one can help you except your supervisor or another enumerator as directed by your supervisor.

2.4.3 No Discussion Of Census Work

You are not to discuss your work with any one except your supervisor, or an authorized industrial census staff.

2.4.4 Disciplinary Proceedings

If you break any of the above rules, disciplinary action will be taken against you.

2.5 CONTINUATION OF YOUR APPOINTMENT

2.5.1 Performance Of Duties

The continuation of your appointment is conditional on your satisfactorily carrying out the duties of an enumerator and maintaining a high standard of behaviour. In this respect, keep in mind that you are representing the Ghana Statistical Service (GSS). Your conduct must therefore be professional.

Note that GSS relies on the good will and co-operation of respondents. Any enumerator who is over aggressive or disrespectful will be dismissed from the Census

2.5.2. Absenteeism

Any person who is absent from training or the enumeration without prior approval from the Industrial Census Coordinator, Regional Statistician or his field supervisor, will be dismissed from the census.

2.5.3. Disruptive Influence

Any enumerator, supervisor or coordinator who in the judgment of the Industrial Census Coordinator creates a disruptive influence will be dismissed from the census.

2.5.4. Breach of Confidentiality

Disciplinary proceedings will be taken should you breach the confidentiality requirements of the census. In addition, you may face legal prosecution.

CHAPTER 3

TRAINING AND SUPERVISION

3.1 TRAINING

All persons selected for the Industrial Census field work must attend the enumerator's training course. Training comprises both classroom work and mock interviews in both English and local languages.

3.1.1 Training Programme

On the first day of training you will be registered and given copies of the training programme, the Enumerator's manual and the questionnaires.

You should study the training programme and take note of topics to be treated on each day. Before each training session study the manual, writing down any questions you have. Ask the questions during the training sessions and make sure you understand all terms used and the procedures to be followed.

3.1.2 High Standards Expected of You

When you are carrying out the enumeration you will deal with managers and accountants. They will expect you to be professional, and in particular that you be knowledgeable about the purpose of the census and about the questionnaires. This manual and training course will adequately prepare you for that. But you have to pay attention during training and seriously settle down to learn the census concepts and procedures.

3.1.3 Demonstrations, Practical Work and Tests

Part of your training consists of observing demonstrations and taking tests. Pay particular attention to the demonstrations (mock interviews).

You will be tested on your knowledge during training. Regard these tests as an opportunity to know your strengths and weaknesses, and to overcome the latter.

3.1.4 Training Continues in the Field

Your training as an enumerator does not end when the formal training period is completed. Each time your supervisor meets you to discuss work in the field, your training is being continued. Each time you talk with a manager your knowledge is being extended.

Formal training provides you with basic knowledge and information regarding the survey, the questionnaires and procedures. Continued observation and supervision during the field work builds on this. As you encounter situations which you did not cover in training, discuss them with your supervisor. Your experience may alert the survey organization to a new aspect of the survey and may assist with the interpretation of data.

3.2 SUPERVISION

As we have noted, training is a continuous process which does not end with the classroom sessions. Observation and supervision during the field work are a part of training. Your supervisor plays an important role in your continuing training and in ensuring the quality of the census. He will:

- Observe some of your interviews to ensure that you are conducting yourself well; that you are conducting interviews in the right manner and interpreting concepts correctly.
- Review each questionnaire to be sure it is complete and internally consistent.
- Meet with you on a regular basis to discuss your performance, and give instructions or work assignments
- Help you to solve any problems you might have with finding the listed establishments, with understanding the concepts in the questionnaire or with difficult respondents.

CHAPTER 4

ENUMERATOR'S FIELD KIT

- 4.1** You will be supplied materials listed in 4.4. These materials are the property of the state and you are accountable for them.
- 4.2** You are required to return to the census organization all materials marked with an asterisk(*). Failure to do so may result in a deduction from your allowance money value of the items not returned.
- 4.3** Failure to return all questionnaires may lead to disciplinary or legal proceedings taken against you.
- 4.4** List of Materials

<u>Quantity</u>	<u>Description</u>	<u>Use</u>
1	*Satchel	For keeping enumeration materials safe. This is to be returned to your supervisor after enumeration is completed.
60	*Phase 2 Questionnaires	For collecting information from the establishments. Every copy is to be returned to your supervisor whether used or not.
2	Blue Pen	For use during the enumeration
1	*Calculator	For doing calculations
1	Enumerator's Manual	For training and reference in the field
1	*Field Note Book	For keeping daily record on enumeration experience and problems.
NA	*Field Summary Form	For summarization of selected items on completed Questionnaires
2 Sets	*Enumerator's Planner	For planning your visits and interviews
1	List of establishments	The establishments to be enumerated.
10	*Phase 1 Questionnaires	For enumerating any in-scope establishment not covered under phase 1
1	*Enumeration Control Form	For recording progress of the enumeration in your zone.
1	Lead Pencil	For making notes
NA	Paper Clips	For attaching notes to questionnaires
1	Letter of Introduction	To introduce the enumerator and inform the respondent about the census.
1	I. D. Card	For Identification
1	Industrial Statistics Bulletin	To show respondent how the results of the census are published if he asks.

- 4.5** Report to your supervisor immediately in case you are not issued some of these materials or you run out of some materials in the field.

CHAPTER 5

FIELD PROCEDURES

The success of the census depends on how well the fieldwork is conducted. For effective fieldwork, field procedures must be strictly followed. Field procedures involve confidentiality, planning your field work, location of establishments and meeting your supervisor.

5.1 CONFIDENTIALITY

PNDC Law 135 which empowers the Government Statistician to conduct this census also forbids him/her or his/her representative from disclosing information on any particular establishment to outsiders.

As an enumerator, you are the Government Statistician's representative in the field. You are required to handle all documents carefully and conduct your work in a manner that will ensure confidentiality. Remember you have taken an oath of secrecy. Legal action will be taken against you if you release or disclose any information on the census to unauthorized people.

a. **Handling of Documents during Interview:**

Questionnaires for each establishment will be put in an envelope with the name and address of the establishment written at the back. Select the correct envelope only when interviewing a respondent. All other envelopes must be kept in your satchel zipped.

b. **Reference to Other Respondents**

Do not refer to names and answers obtained from respondents while interviewing another respondent. Do not let a respondent see a completed questionnaire of another respondent.

c. **Keeping of Census Materials at Home:**

Keep all census materials, especially documents, in safe and secured places. Preferably, keep them in boxes or cup-boards with locks.

d. **Keeping Census Data from Members of Family and Friends**

Do not discuss census data with members of your family or friends. You must not permit any unauthorized person, even a member of your family, to see a completed questionnaire. You must not solicit for, or accept assistance from non-census personnel in your enumeration duties.

5.2 PLANNING YOUR FIELD WORK

After your training you will be given your materials and the list of establishments you are expected to cover. You should aim to finish your work by the end of the assigned period.

Plan your enumeration using the Enumerator's Planner (Form NIC/02/06) to indicate the dates of your first visit to an establishment and any appointments you make. Locate and visit all the establishments listed in your area within the first two weeks. This means that you will visit at least 3 establishments a day in the first two weeks.

5.3 LOCATION OF ESTABLISHMENT

5.3.1 Finding The Establishment

To find your establishment, the establishment name and address (description of the physical location) should be used as a guide.

The list you will be given will have the names and physical locations of the establishments you are to enumerate. Some of the physical locations have been given in relation to major landmarks. When you get to the area, look for the street and the number of the building or principal guide given in the description. In most cases you will see a signboard with the name of the establishments or the name boldly written across the front of the building housing the establishments.

5.3.2 Problems Of Location

Although your supervisor will help you solve locational problems which you may encounter, it is important you know your area of enumeration well and make every effort to locate all establishments on your list. Here are some of the locational problems you may come across.

a. **Cannot trace establishment**

Enquire from neighbours whether they know the establishment. If not, proceed to locate other establishments and report to your supervisor as soon as possible. He will help you to locate it and where this fails he will tell you what to do next.

b. **Establishment Closed Down**

If you locate an establishment that is closed down, find out from neighbours when it was closed down and report to your supervisor.

c. **Establishment has been relocated**

Enquire from neighbours when the establishment moved and where it is relocated. If the new location is in your area, proceed to enumerate it. If it is located outside your area of enumeration, report to your supervisor.

5.4 FIRST VISIT TO ESTABLISHMENT

5.4.1 What to do during the first Visit

As mentioned above, you should visit all your establishments within the first two weeks of the enumeration period. The purpose of this visit is to inform respondents of the census and introduce the questionnaire to them. You will be given a letter of introduction for this purpose. The first visit is important. Chapter 6 of this manual tells you how to comport yourself when you visit a respondent. You should bear those points in mind and make a good impression at this visit.

You are to find out from the respondent whether

- (i) he/she wants to complete the questionnaire himself/herself or
- (ii) he/she will need some help.

a. **Respondent Completing The Questionnaire**

If a respondent wants to complete the questionnaire himself/herself, leave the questionnaire behind and make an appointment with him/her when you are to return to collect it.

b. **Respondent needs Assistance**

If a respondent needs assistance in the completion of the questionnaire, assist immediately or obtain an appointment from him/her as to when to go back for the interview. If the respondent

does not ask for the questionnaire you should not leave it behind. If he/she asks to look through it, wait for him/her to do so and take it back. If he/her insists on keeping it, give out one copy only.

c. **Appointments**

In making appointments politely impress on respondents the need to complete field work before the end of the period. Be careful one appointment does not coincide with another in planning your work. For example, do not make two appointments for the same day within a short time interval. Maintain a minimum of three hours interval. Also take into consideration the distance between the two establishments. Keep all appointments you make with respondents.

5.4.2 Problems Arising From The First Visit

a. **Interview at First Visit**

The first two weeks are to be used for planning your work. However, if on a first visit a respondent insists on having the interview immediately, you should conduct it. It is difficult to get small-scale establishments like seamstresses, carpenters and bakers to keep appointments. Some of such respondents have been known to make appointments with enumerators and have then stayed away from their establishments. You need to exercise your judgment in such cases and conduct interviews on your first visit.

b. **Refusals and Unco-operative Respondents**

If a respondent tells you he is busy and does not want to be disturbed, ask when you should call back. If after introducing the questionnaire to a respondent he/she says he/she does not want to be interviewed, impress upon him/her that the information is confidential. If he/she still refuses, report to your supervisor.

5.4.3 Completing Enumerator's Planner

a. Refer to Appendix 1

b. In the columns indicated write the reference number and name of the establishment

c. Indicate the activity on any particular date by the following:

Put "D" in the column when you visit an establishment and make an appointment. Put "I" in the column to indicate the date for interview. Put "C" in the column to indicate the date for the collection of completed questionnaire. In each case indicate whether the appointment is in the morning or the afternoon. Show postponed appointment by writing C¹, C² or I¹, I² in the relevant column.

d. Note that the first two weeks should be used mainly for the distribution of questionnaires and making appointments. There may be cases when you have to conduct interviews within the two weeks. Your planner and other control records should reflect such cases. Give a copy of your planner to your supervisor. This will enable him to know your movements and locate you.

5.5 MEETING WITH YOUR SUPERVISOR

As mentioned in Chapter 3 your supervisor will support you in your field work. He will arrange regular meetings with you. You should report all field problems to him. Before you start enumeration, your supervisor will arrange with you the time and place you are to meet him during the first two weeks. On the Monday of the third week of enumeration your supervisor will meet you and other enumerators of his team. Be on time for the meeting. The purpose of the meeting is for you and your supervisor to discuss any problem you might have encountered during your first visits. The supervisor will review your appointments and help to solve your problems, if any. He will arrange subsequent meetings with you. If you have an appointment for that morning, you must let your supervisor know before-hand.

5.6 GENERAL ENUMERATION PROBLEMS

- a. Listed below are some problems you may come across apart from those mentioned under sections 5.3.2 and 5.4.2 of this Chapter.

5.6.1 Establishments Not Covered in Phase 1

As you move within your assigned area look out for other industrial establishments not on your list. If you locate any in-scope establishment not enumerated in Phase 1, enumerate it with both phase 1 and the relevant phase 2 questionnaire. For manufacturing establishments engaging less than ten persons do not complete a phase 2 questionnaire.

5.6.2 Directed to Head Office/Accountant

Some establishments may not have the records needed for completing the questionnaire and may direct you to either their head offices or accountants. If the place you are directed to is outside your area, inform your supervisor. Arrangements will be made to have the questionnaire completed by the enumerator of that area.

5.6.3 Workers On Leave

If you come across establishments where all workers of the establishment are on mass leave, enquire from the watchman or neighbours when work will resume and attach a note to the questionnaire and give it to your supervisor. Arrangements will be made to enumerate the establishment later.

5.6.4 Person to Give Information Not Available

If the persons who can give you information has travelled, is sick or not available, find out whether his/her assistant can do it. If not find out when he/she is expected to be back and attach a note to the questionnaire and give it to your supervisor.

5.6.5 Accounts are Not Ready/No Accounting Records

If accounts are not available or will not be ready during the enumeration period, carefully prepared estimates should be taken.

5.6.6 Establishments Listed But Out of Scope

If you realize an establishment on your list is out of scope before you start an interview, inform your supervisor. He will conduct further investigation and instruct you on what to do next. If you start an interview before realizing that the establishment is out of scope, go ahead and complete the interview. Attach a note to the questionnaire.

5.6.7 Call-Backs

A respondent may reschedule an appointment and ask you to call back. It may also be that a respondent may not be around when you call for the appointment. At your second call-back (that will be your third visit to the establishment) if the respondent is not available for the interview leave a copy of a call-back card and one questionnaire behind. Report to your supervisor.

5.6.8 Other Problems

You may come across other problems for which you may not find specific answers in this manual. The general principle is to record all field problems in your note book and report them to your supervisor. When in doubt, consult your supervisor.

5.7 FIELD CHECKS

To avoid repeating mistakes, your supervisor will go through every completed questionnaire with you regardless of whether it was filled out by you or by the respondent. The purpose is to detect and correct errors as quickly as possible. Make sure he/she goes through the first two questionnaires you completed before you proceed. This will ensure that any errors in the two are not carried into the others. When he finds errors in them he will point them out to you to go back and make the correction.

5.7.1 Check Interviews and Spot checks

Your supervisor has been instructed to re-interview some of your respondents. The respondents to be re-interviewed will be selected at random. Your supervisor will also conduct some spot checks. You should therefore conduct all your interviews properly.

5.8 FIELD RECORDS

The records enumerators keep will enable the Census Secretariat to know the progress of enumeration in the field. You must therefore keep good records of your work.

5.8.1 Use Of Notebook

You will notice one of the items in your field kit is a note book. It is meant to be used as a diary. You must record all enumeration experiences and problems in it for discussion with your supervisor. In doing this follow the format in Appendix 2.

5.8.2 Completing Enumerator's Control Form

Refer to Appendix 3.

After completing each questionnaire, you must fill the Enumerator's Control Form. You will notice that all the information you will need for completing the form would have been recorded in your notebook (if you have made good use of it).

In completing the form, write the required information in the columns provided.

Column 1:	Number of establishments visited (reference number)
Column 2:	The names of the establishment
Column 3:	The physical location
Column 4:	Main industrial activity
Column 5:	Type of questionnaire used (3A, 3B etc.)
Column 6:	Date of your First Visit to establishment
Column 7:	Date of collection of questionnaire or interview
Column 8:	Name of respondent (Ref. Item 20.1 on the questionnaire)
Column 9:	General remarks

Before you hand over the form to your supervisor, you must sign it. Your supervisor will check and also sign.

5.8.3 Completing Enumerator's Field Summarization Form

You will be given Enumerator's Summary Form (Appendix 4) on which you are to make some basic summaries. You will do this at the end of enumeration.

The Census Secretariat plans to make census results available to users of statistics as early as possible. Having basic summaries done in the field will help to achieve this aim. You should therefore do your summaries carefully, having in mind the fact that you are taking part in the process of quick release of data.

Follow the steps below in completing the form:

- a. Write your enumeration zone number, supervisory area number, the name of the region and the regional code in the spaces provided at the top.
- b. List the names and reference numbers of all the establishments you have enumerated by industry. This means you list all mining and quarrying establishments and leave a line for "total". Follow by listing all manufacturing establishments. Leave a line for "total". Continue with electricity and water leaving a line for total. Follow by listing all construction establishments with their total and end with "Grand total".
- c. Tick either column 1, 2 or 3 by referring to item 2.3 on each questionnaire. This will tell you whether an establishment engages either less than 10, 10-19 or 20 or more persons.
- d. Complete column 4, 5, 6 and 7 by transcribing the required information from the questionnaires. The item to be picked from the questionnaire for each column is indicated by the number of the question at the top of the relevant column.
- e. For column 5, you will need to add up the two figures given for item 4.3 and write down the sum.
- f. Check all the figures on the summary sheet to ensure you have copied them rightly.
- g. Add up the figures for each industry to get its total.
- h. Sum up the totals for each industry to obtain the "Grand total".
- i. Certification
Before you initial in the space provided you must be sure your totals are correct.
- j. Your supervisor will check this before both of you sign the form.

5.8.4 Completion of Your Work

- a. When you complete your work you must contact your supervisor. He/she will sit down with you and review your work. He/she will go through your control form and sign it if satisfied.
- b. Inventory of Field Kit.
The supervisor will check all the items you were supplied to be sure you have returned all items that need to be returned. He/she will give you a certification to this effect.
- c. Certificate Of Good Work
Your supervisor will issue you with a certificate if he/she is satisfied with your work. If not, you will be sent back to re-do an interview or correct errors.

5.9 PAYMENT OF ALLOWANCE AND DEBRIEFING

Your supervisor will inform you when you should attend a debriefing meeting and pay you your allowance.

CHAPTER 6

PREPARING FOR AN INTERVIEW

6.1 INTRODUCTION

As mentioned earlier, your training will consist of a combination of lectures and practical sessions. You must become thoroughly conversant with the instructions and the questionnaires so that you can approach the respondents with confidence.

6.2 APPEARANCE AND WHOM TO INTERVIEW

6.2.1 Your Appearance

You should be neatly dressed. You should not wear fancy clothing. You should be cheerful, polite and confident, because in most cases the firms' management will be aware that a census is being taken and will expect a visit from an enumerator, and will therefore be cooperative.

Make sure you have the following items before an interview:

- Your identity card
- Introductory letter to the respondent
- The correct questionnaire for the establishment
- Your instruction manual
- Your pen
- Your field control form
- A copy of an industrial statistics bulletin

6.2.2 Whom To Interview

Enter the premises. Tell the receptionist or other person that you are a census enumerator and ask to see the manager, if he is not in, ask to see an assistant manager or the accountant. Do not easily be put off by a receptionist who says the manager is "busy". Show your identity card, and ask her to tell the manager you need to see him for twenty minutes on industrial census business. If you are unable to get through to the manager, see the accountant, or assistant manager.

On meeting the manager or assistant manager or accountant, introduce yourself. Show your identity card and hand him the letter of introduction. Explain the purpose of your visit and ask who will be responsible for completing the questionnaire. Ask whether they wish the questionnaire to be left for them to complete; or whether they require assistance. Arrange an appointment to return to pick up the questionnaire or to complete the questionnaire by interview. Thank everyone on your way out and depart.

6.3 APPROACHES TO ENUMERATING ESTABLISHMENTS

There are three approaches to enumerating establishments

1. Questionnaire drop off and pickup
2. Direct interview
3. Combination of 1 and 2

Each of these is described below.

6.3.1 Questionnaire Drop Off and Pick Up

If the establishment wishes the questionnaire to be left for them to complete, drop it off and arrange an appointment to pick it up. On the appointed day, meet the receptionist and remind him/her of your previous appointment with the manager (or whoever is the respondent). Greet the respondent and state that you have come back for the census questionnaire. Thank him, and say that you are required to review it.

Review Procedure.

1. Confirm that the information preprinted in the identification is correct if no amendment has been made.
2. Check that the accounting period covers at least six months of 2003

3. Review the description of principal industry. Is it adequate?
4. Ask the respondent if he had any difficulties in completing the questionnaire and write them in your note book.
5. Complete section 7 of the questionnaire. Check for completeness and accuracy.
6. Ask respondent to complete certification if this has not been done.
7. Envelope the questionnaire and put it in the satchel.
8. Thank the respondent for his/her cooperation and depart.

6.3.2 Direct Interview Procedure

Meet receptionist and greet the manager as in 6.2.2. If necessary remind him of your appointment. Take questionnaire out and begin the interview.

Procedure:

1. Explain that the census is conducted for construction, electricity and water, all mining and manufacturing establishments. Explain also that the information is confidential.
2. Check with the respondent whether the information in question 1.1 and 1.2 (Section 1) is correct and make any corrections.
3. Proceed to questions 1.3, 1.4 and 1.5. These questions are quite easy, and should enable you to build up a feeling of friendliness with your respondent. His cooperation will increase as he sees you know what you are about. Continue with the other questions and complete the interview.
4. Refer to your manual if necessary. It is meant to help you
5. Complete Section 7 at the end of the questionnaire and ask the respondent to complete the certification.
6. Put the questionnaire in the envelope provided, in front of the respondent, then put the envelope in your satchel.
7. Thank the respondent for his cooperation and depart.

6.3.3 Interrupted Interview

You may be partially through the interview when the manager announces that he/she has another appointment or part of the data you require is not readily available. In the case of the manager having another appointment, find out if any other person can assist. If the data is not readily available, make another appointment.

6.4 CONDUCTING AN INTERVIEW

6.4.1 Interview Technique

Successful interviewing is an art and should not be treated as a mechanical process. Each interview is a new source of information, so make it interesting and pleasant. The art of interviewing develops with practice but there are certain basic principles which are followed by every successful interviewer. In this section you will find a number of general guidelines on how to build rapport with the respondent and conduct a successful interview.

6.4.2 Building Rapport With The Respondent

The enumerator and the respondent are strangers to each other and one of the main tasks of an interviewer is to establish **rapport**. The respondent's first impression of you will influence his/her willingness to cooperate with you.

Be confident and courteous. Smile, and make a salutation like "Good morning", and proceed with your introduction, something along the lines; "My name is I am an enumerator from the Ghana Statistical Service, and would like to make an appointment for an interview.

Never adopt an apologetic manner, and do not use words like "could you spare a few minutes? Would you mind answering some questions?. Yours is an important national assignment, there is no need to be apologetic. On the other hand, don't try to be over bearing. Courtesy and politeness does it. For example, say "I would like to ask you some questions/I would like to talk to you for a moment".

6.4.3 Stress Confidentiality

If the respondent is hesitant about giving data, explain that the information is confidential. Data is only published in aggregated form. It is not possible to identify information on any particular establishment. Show him your copy of the industrial Census Bulletin. Do not mention the names of other establishments or respondents you have enumerated. Be very careful that you only have the respondent's questionnaire before you. Any other questionnaires must be in their envelopes, in the satchel. The satchel must be zipped. Your careful handling of questionnaires will do much to build up the respondent's confidence.

6.4.4 Length Of Interview

Most respondents may not be comfortable with the length of the interview. Many of them may express concern about how long the interview will take. Patiently and politely inform him/her that the interview would not take long and that about two hours is required. If the respondent persists that another day be fixed, then make an appointment.

6.4.5 Remaining Neutral

When assisting the respondent to complete the questionnaire you must be disciplined in your reaction to some of the information he/she may give you. Do not by your expression or your reply register disbelief in the data he has given you. Be calm and neutral whenever you need to indicate that the data is inconsistent with other data previously given.

6.4.6 Don't Estimate for the Respondent

If the establishment has informal accounts, some data will have to be estimated. Know the techniques to assist respondents to make an estimate. Remember it is the respondent who is to make the estimate, not you. For example, if the price of kerosene is to be estimated do not say it is ₦17,500. The price differs from place to place.

6.4.7 Do Not Change the Sequence of the Questions

Ask the questions in the order as they are on the questionnaire. Do not change around. When assisting with the completion of the questionnaire, make sure that both you and the respondent each have a questionnaire before you.

6.4.8 Don't Allow the Respondent to Rush Through the Interview

Respondents sometimes try to rush through the interview. Politely say that you have to get answers to each question, and calmly proceed with the interview.

Always be polite and patient

Don't ever express disbelief with the respondent's answers

Never argue. Be professionally persistent.

CHAPTER 7

INTRODUCTION TO QUESTIONNAIRES AND FORMS

7.1 TYPES OF QUESTIONNAIRES AND FORMS USED

The questionnaire is the means by which we collect information. It contains questions, definitions needed are for planning the enumerator's itinerary and recording summary information on the establishments enumerated.

7.1.1 Questionnaire Shoulder Numbers

Each questionnaire has a title and a number to identify it. The number is referred to as a "shoulder number". It appears at the top right or top left hand corner of the questionnaire. Shoulder numbers consist of the following:

The prefix NIC which stands for National Industrial Census.

The digits 02 which stand for Phase 2

One digit or a digit and a character which designate the questionnaire e.g. 3A.

Thus the manufacturing long questionnaire has the shoulder number: NIC/02/3A.

7.1.2 Titles and Numbers of the Questionnaires (1):

<u>Title</u>	<u>Shoulder No.</u>
National Industrial Census 2003 Mining & Quarrying	NIC/02/2
National Industrial Census 2003 Manufacturing	NIC/02/3A
National Industrial Census 2003 Manufacturing	NIC/02/3B
National Industrial Census 2003 Manufacturing	NIC/02/3C
National Industrial Census 2003 Electricity & Water	NIC/02/4
National Industrial Census 2003 Construction	NIC/02/5

7.1.3 Titles and Numbers of the Forms (2):

Enumerator's Field Planner	NIC/02/6
Enumeration Control Form	NIC/02/7
Enumeration Zone Summary	NIC/02/8

7.1.4 Separate questionnaires for mining and quarrying, manufacturing, electricity and water industries, construction and small establishments.

A separate questionnaire has been designed for each of mining, manufacturing and electricity and water industries. The manufacturing questionnaire has three versions, the long version, 3A, for establishments engaging 20 persons or more, the medium version, 3B, for establishments engaging between 10 and 19 persons and the short version, 3C, for establishments engaging less than 10 persons.

7.2 STRUCTURE OF QUESTIONNAIRE

7.2.1 Each Questionnaire Comprises:

1. A title page setting out the title and general information
2. A body comprising the six subject sections
3. Two final sections containing checks for completeness and accuracy and the respondent's certification.

7.2.2 Subject Sections (Except for the short questionnaire)

Each questionnaire is arranged in eight sections:

1. Identification
2. Employment and earnings
3. Stocks
4. Fixed capital formation
5. Input costs
6. Sales and receipt

7. Gross output
8. Accuracy checks and certification.

There are no questions on Stocks in the Construction and Electricity and Water questionnaires, while the short questionnaire has no questions on Fixed Capital Formation and Stocks.

7.3 TYPES OF QUESTIONS

There are two types of questions: simple and compound. The terms “simple” and ‘compound” refer to the structure of the question and not the concepts involved. Do not be put off by compound questions. Regard them as a grouping of simple questions.

- **Mark Box Questions**

Some questions are designed with boxes in which to mark the appropriate response. The answer is recorded by putting “X” in the appropriate box. Illustration:

Line Questions.

In these questions answers are written on the line provided. Illustration: Two weeks

- **Panel Questions**

These are questions where a value or quantity is required to be entered in a panel.

Illustration:

Panel questions are usually prefaced with:

Inclusions, a statement of what is to be included

Exclusions, a statement of what is to be excluded

Valuation, a statement of the basis of valuation

- A total is required for panel questions. Totals appear at the bottom of the question
- In panel questions some spaces have been cancelled by blocking. These spaces are not applicable. Do not enter data in them.

7.4 RECORDING OF MONETARY VALUES

Throughout the questionnaire, data on money should be recorded in cedis. Where values are quoted in currencies other than the cedi, record these and make a note for the conversion to be done during editing.

Examples:

1. ¢6,000 recorded in thousand of cedis becomes 6
2. ¢100,240 recorded in thousands of cedis becomes 100
3. ¢1,723,675 recorded in thousands of cedis becomes 1724.
4. ¢1,723,675 recorded in millions becomes 1.72.

In the first two examples the given figure is divided by 1000 and since the third digit from the right is less than 5 in each case, we arrive at the new values 6 and 100 respectively. In the third example, the third digit from the right is greater than 5 and as a rule, the 4th digit from right is increased by 1 giving 1724 as the new value. In the fourth example the value was divided by 1,000,000 and recorded to two decimal places.

7.5 RE-PRINTING INFORMATION

Information on the name and physical location of the establishment, form of organization, postal address, type of ownership and nationality of ownership (page 2 of questionnaire) collected during the first phase of the census will be pre-printed on the questionnaires. Ask the respondent to amend any of them if incorrect.

Cancel incorrect information by drawing a neat line through it and record the correct information (in capital letters) in the space above or below the cancelled information.

You will be supplied with two pre-printed questionnaires for each establishment in your area of enumeration.

7.7 PRINTING AND ALIGNMENT OF FIGURES

The enumerator is to print in capital letters all entries in the questionnaires.

Careless entering of figures could cause great confusion and will not be tolerated. A high standard of neatness and alignment of figures is required.

Where necessary, enumerators will be trained to print clearly.

CHAPTER 8

COMPLETING THE QUESTIONNAIRE

The questionnaire has been designed such that every space must be filled appropriately. Do not leave any blank space in the questionnaire

Where quantities or values are not available a dash (-) should be drawn through the panel.

Where a response to a question is zero, write "0".

All monetary values should be recorded in MILLION CEDIS EXCEPT where otherwise indicated.

Sections of the questionnaire not applicable to the responding establishment should be marked N/A (i.e. Not Applicable).

A: SOURCE OF DATA

In completing the questionnaire, data may come from one or more of the following sources; financial statements, books of account, other documents or may be estimated.

a. Financial Statements

In most large scale establishments accounting records are kept and at the end of the financial year a statement on financial operations is compiled, audited and published. The data asked for in the questionnaire are most easily obtained from financial statements.

b. Complete Books of Account

All large establishments will keep financial records of their activities (i.e. keep accounting books) but at the time of your visit the financial statement may not have been published. The accounting records contain the data required for completing the questionnaire.

c. Incomplete Documentary Sources

An establishment may keep a record of purchases, sales, etc. which may not cover the whole period of operation (as stated in question 1.3). Such records are referred to as an incomplete documentary source. Data from this source can be used as a basis for making careful estimates.

d. Estimating Procedure

Where small establishments do not keep formal accounts data may have to be estimated. Estimating procedures are set out in a supplement to this manual (page 56).

B. ORGANISATION OF INSTRUCTIONS ON COMPLETING THE QUESTIONNAIRE

Instructions on questions cover the following points:

- (a) Purpose of the question
- (b) Definition and explanation of concepts
- (c) How to record the data
- (d) Example from the questionnaire.

SECTION 1: IDENTIFICATION AND CLASSIFICATION INFORMATION

Reference Number

The purpose of the reference number is to link phase 1 and phase 2 data on the same establishment. It is also used for identification. The number is entered on the questionnaires in the Head Office.

Enumeration Zone Number

The enumeration zone numbers are entered on the questionnaire in the Head Office. It is part of the identification for the questionnaire.

1.1 Name and Physical Location

The name and physical location of the establishment is required for identification and is entered in the Head Office. During the pilot survey a number of questionnaires were found to have incorrect information on their location. The respondent must check his/her address. If the address is incorrect rule it out neatly and print in the correct address.

1.2 Other Information

This information will be entered on the questionnaire.

- Postal address
- Form of organization
- Type of ownership
- Nationality of ownership
- Region name
- District name
- Town name

Check with the respondent that the entries are correct. If not, rule a line neatly through the entry and print the correct information.

QUESTION 1.3: PERIOD OF OPERATION DURING 2003

The purpose of this question is to assist in calculating the percentage of establishments that operated for part of the year. This information will assist in adjusting the census results.

Mark (X) in the box that applies. If box 1 is marked, skip to question 1.5. If box 2 is marked, record the number of months operated in the space to the right. The number of months should be recorded in double digits from 01 to 11 (i.e. for 1 month to 11 months).

Example

1.3 PERIOD OF OPERATING DURING 2003
 Mark (X) in the box that applies.

<input type="checkbox"/> 1 Operated throughout 2003. (GO TO 1.5)	<input type="checkbox"/> 2 Operated for only part of 2003. (enter number of months) (GO TO 1.4)
<input type="checkbox"/> 3 Establishment was idle during 2003. (GO TO 1.4)	

1.4 REASONS FOR NOT OPERATING THROUGHOUT THE YEAR

.....

.....

FOR OFFICE USE

QUESTION 1.4: REASONS FOR NOT OPERATING

If either box 2 or box 3 is marked, the reason for not operating throughout the year should be stated on the lines provided.

QUESTION 1.5: ACCOUNTING PERIOD

The purpose is to ensure that the accounting periods of all establishments relate to the reference year. The reference period for the census is the calendar year 2003. That is, from 1st January to 31st December 2003. Many establishments will provide information on a financial year basis. Not all financial years are from 1st January to 31st December. For example, the following are possible 2003 financial years:

1st April 2003 to 31st March 2004
1st July 2002 to 30th June 2003

Because financial years vary for each establishment a rule has been introduced that the financial year reported on must include at least 6 months of 2003. Under this rule the two examples cited above would be accepted. Some establishments in Ghana refer to the year in which the accounting period ends as the accounting year. If the accounting or financial year ends in 2003 then it is called the 2003 financial year. This could give rise to a financial year which is not acceptable. For example, 1st April 2002 to 31st March 2003. Even though this is called the 2003 financial year it is unacceptable, as it only includes three months of 2003 and not the six months required. In this case the enumerator should ask the respondent to report on the financial year 1st April, 2003 to 31st March 2004. You must be clear that the accounting period covers six months or more of 2003. If six months of 2003 is not covered, then the questionnaire will be returned to the enumerator who will have the difficult task of explaining to the management of the establishment that the accounting period was wrong and information will have to be supplied again for the right period.

Example

<p>1.5 ACCOUNTING PERIOD</p> <p>Please state the accounting period covered by the questionnaire. From/..../ 20... to/..../ 20...</p>
--

QUESTION 1.6: PRINCIPAL INDUSTRIAL ACTIVITY

Purpose

The classification of industrial activity is one of the main tasks undertaken in the census. This classification is used as a basis for industrial decision-making. It is important that the census obtain an accurate description of industry in Ghana, and this depends on how well enumerators obtain answers to this question.

Organisation of the Question

On the Mining questionnaire, 1.6 appears as Principal Mining Activity. On the Manufacturing questionnaire it appears as Principal Manufacturing Activity, while on the Construction questionnaire, it appears as Principal Construction Activity.

Selecting the Principal Industrial Activity

In mining there is usually only one activity; in some cases mining and quarrying may be undertaken by the same establishment. It is usually clear what the activity of a mine or quarry is; gold mining, diamond mining, or quarrying for stone, sand, clay, etc. Similarly with electricity, the activity is the production and distribution of electricity. With water it is the production and supply of water.

Construction work includes general building construction (houses, office buildings, farm buildings, etc.), civil engineering construction (roads, bridges, culverts, harbours, sewerage systems, irrigation systems, tunnels, etc.), site preparation (demolition/wrecking of buildings and other structures, clearing of building sites, land filling, blasting, etc.), specialized construction of parts of general building projects that requires special skills and equipment (drilling of wells, foundation work, roof covering stone setting, etc.), building installation (installation of all kinds of utilities-plumbing, installation of heating and air-conditioning systems, elevators, etc., installation of illumination and signaling systems for roads, railways, telecommunications, etc.) and the renting of construction or demolition equipment with operator.

Selecting the Principal Manufacturing Activity

Consider two examples:

Example 1

An establishment that manufactures only product e.g. a bakery that produces only bread. A factory that manufactures only cement. In this case it is simple to state the principal activity.

Bread baking

Cement manufacturing

Example 2

An establishment that has several production lines and a number of products e.g.

- a. Processing of meat products
- b. Processing of dairy products
- c. Processing and packaging of coffee

In this case it is not simple to state the principal activity.

Since the purpose is to know the principal industrial activity, we ask the respondent which of the products has the highest value of output. If for example, (a) generates the highest value, then the principal manufacturing activity is “processing of meat products”.

There was no attempt at getting a description for all the three processes; only the principal process or activity was selected and described.

Example 3

An establishment that is engaged in

- a. Manufacture of roofing tiles
- b. Construction of buildings.

In this case if the establishment does not keep separate books of account, then use the value of output for each activity to determine the principal industrial activity. If separate books of account are available, then treat them as different establishments in manufacturing and construction.

Poor Activity Description

Poor description of industrial activity is one of the main reasons questionnaires are returned to enumerators, who must then go back to the establishment and get a more adequate description.

An example of poor description is the following: “Manufactures Machinery”. This is unacceptable since it would be difficult to know which of the following classification code to use:

Manufacture of engines and turbines

Manufacture of agricultural machinery and equipment

Manufacture of metal and wood working machinery

Manufacture of office and accounting machinery

Manufacture of electrical industrial machinery

Manufacture of electrical appliances and houseware

All such description as” manufactures machinery”, “manufactures appliances”, manufactures equipment” are inadequate and will not be accepted.

Other Examples of Poor Description

The following are some examples of poor industrial activity descriptions obtained from phase 1 of the industrial census. The questionnaires would have been sent back to the enumerator. Comments on these are in brackets.

Manufacture of machine parts.
(What Machines?)

Manufacture of office equipment
(What equipment? Calculators, Writing pens, pins, paper clips, pencils, air-conditioners, chairs?)

Fabrication of steel
(What sort of fabrication? For buildings, cars, bridges, durables? It could be for hundreds of different things)

Manufacture of metal products
(There are hundreds of different metal products. Which ones?)

Wood processing
(What? Dressing timber? Making Furniture?)

Manufacture of furniture
(What sort of furniture? Home, office; made of steel, glass, wood?)

Rules For Writing Good Activity Description

- a. The respondent can always give a good description of the establishment’s activity. Listen to him carefully. If necessary get him to write it out on a piece of paper.
- b. Nouns such as “machinery”, equipment”, appliance” are to be qualified by at least one and usually two adjectives, e.g.:
Manufacture of agricultural machinery
Manufacture of electrical laboratory equipment
Manufacture of electrical household appliances
Manufacture of wooden household furniture
Drilling of wells
Wiring of houses
Construction of roads
- c. When in doubt, write down the establishment’s main products
e.g. “Produces canned pineapple juice, canned pineapple chunks, canned orange juice, bottled mineral drinks, bottled syrups”.

1.6.2 Other Manufacturing Activities

In example 2 above we considered a firm that has following activities:

- a. Processing of meat products
- b. Processing of dairy products
- c. Processing and packaging of coffee.

The processing of meat products was selected as the principal activity on the basis that it earned the highest receipts,. The processing of dairy products and the processing and packaging of coffee would be entered in question 1.6.2.1 and 1.6.2.2. a line should be drawn through Question 1.6.2.3 to indicate there are no further manufacturing activities.

1.6.3 Non Manufacturing Activities

A manufacturer may have a retail outlet. The establishment in example 2 for instance, may sell its products in which case we should enter in 1.6.3.1. "Retail establishment's". An establishment that manufactures office and accounting machinery may also offer repair services. In this case state in 1.6.3.1. "Repairs office and accounting machinery"

1.6.4 Principal Industrial Activity in 2004

The purpose is to find out if the establishment's principal activity in 2004 is the same as in 2003. Mark X in the box that applies. If box 2 is marked, describe the principal activity in 2004 on the lines provided.

Example.

1.6 PRINCIPAL MANUFACTURING/CONSTRUCTION ACTIVITY	
1.6.1: Describe establishment's principal manufacturing /construction activity during the 2003 financial year. (e.g. manufacturing of aluminium buckets, manufacture of household electrical appliances, etc).	
.....	FOR OFFICE USE
.....	<input type="text"/>
1.6.2: Other manufacturing/construction activities during the 2003 financial year.	FOR OFFICE USE
1.6.2.1:	<input type="text"/>
1.6.2.2:	<input type="text"/>
1.6.2.3:	<input type="text"/>
1.6.3: Non manufacturing/construction activities during the 2003 financial year. (e.g. retail service, repairs, etc).	FOR OFFICE USE
1.6.3.1:	<input type="text"/>
1.6.3.2:	<input type="text"/>
1.6.3.3:	<input type="text"/>
1.6.4: Is the principal manufacturing/construction activity the same for the 2004 financial year? Mark (X) in the box that applies.	
<input type="checkbox"/> 1 YES	<input type="checkbox"/> 2 NO
If NO, state the principal manufacturing/construction activity for the 2004 financial year.	
.....	FOR OFFICE USE
.....	<input type="text"/>

SECTION 2: EMPLOYMENT AND EARNINGS

QUESTION 2: PERSONS ENGAGED

The purpose of collecting information on persons engaged is to analyze employment in industry. The data is to be collected for the pay period nearest to 30th June, 2003 and 30th September 2004. Data is to be collected on two categories of persons engaged:

Employees (Paid Workers)
Unpaid Workers

Data collected on employees are for the following categories:

2.1.1 Operatives (direct production/construction workers)

Operatives (direct production/construction workers) refer to all employees who are directly engaged in the production/construction process or any related activities in the establishment.

2.1.2 All other paid workers.

These are employees other than operatives like administrative, clerical and accounts personnel such as salaried managers, clerks, typists and salesmen.

The data to be collected on unpaid workers are for the following categories:

2.2.1 Working proprietors and active business partners

This category is made up of proprietors and partners who are actively engaged in the management of the establishment and are not paid a salary or wage.

2.2.2 Learners

This is made up of all persons undergoing on-the-job training without pay, including unpaid apprentices.

2.2.3 Unpaid family workers (This may not be a large category)

These are family members of any of the owners who work in the establishment without regular pay for at least one-third of the normal working period.

2.3 Total number of persons engaged

The total number of all persons engaged by the establishment is to be entered at the bottom in the spaces provided. The figures entered in each column must be properly set out; tens, hundreds and so on and neatly aligned in the columns. This makes addition much easier. Sloppy entry of figures is the cause of much error in addition. You are to check the column totals and ensure that the figures sum up to the total. If the totals do not match, ask the respondent to make the necessary adjustments. The definition for each category of persons engaged is on the questionnaires. The definitions are also given here for completeness.

DEFINITIONS

2.1 EMPLOYEES

Employees are all persons working for and paid by the establishment.
INCLUDE all such persons whether working full-time or part-time.
INCLUDE all employees on sick leave, paid vacations or holidays.

2.1.1. Operatives (direct production/construction employees)

Operatives refer to all employees who are directly engaged in the production/construction process or any of the related activities in the establishment.

Direct production employees

INCLUDE persons engaged in fabricating, processing or assembling, mechanics who attend to the machines, shop cleaning personnel, warehousemen, packers, shop testing and record keeping personnel, and paid apprentices.
INCLUDE any supervisory personnel whose function is to record or speed up any step in the production process.

Direct construction employees

INCLUDE persons engaged as masons, carpenters, labourers, working foremen, time keepers, equipment operators, mechanics, paid apprentices and job site record keepers.

EXCLUDE supervisory employees above the working foreman level.

2.1.2. All Other Paid Workers

All other employees other than operatives as defined above, e.g. architects, engineers, administrative, clerical and accounts personnel such as salaried managers, clerks, typists, salesmen and supervisory employees above working foremen level, etc.

For manufacturing EXCLUDE day workers in the clothing industry.

2.2 UNPAID WORKERS

2.2.1. Working Proprietors and Active Business Partners

Proprietors and partners who are actively engaged in the management of the establishment and are not paid a salary or wage. (Managers and directors of corporations working for pay should be reported with “other employees”).

2.2.2 Learners

INCLUDE all persons undergoing on the job training without regular pay and unpaid apprentices.

2.2.3 Unpaid Family Workers

All persons who are family members of any of owners and working in the establishment without regular pay for at least one third of the normal working period.

DAY WORKERS IN CLOTHING INDUSTRY

Tailoring establishments often employ day workers. The workers are usually paid at the end of each day's work. The establishments keep no record and have difficulty estimating the number of day workers employed in any period. They are to be excluded from the census.

Example

MANUFACTURING (QUESTIONNAIRE 3A)

<u>SECTION 2: EMPLOYMENT AND EARNINGS</u>		2003			2004		
		PAY PERIOD NEAREST TO 30TH JUNE 2003			PAY PERIOD NEAREST TO 30TH SEPT., 2004		
		TOTAL	MALE	FE- MALE	TOTAL	MALE	FE- MALE
2. PERSONS ENGAGED	State the number of persons engaged in the following categories during the pay period nearest to 30th June, 2003 and 30th September 2004.						
2.1 EMPLOYEES	All persons working for and paid by the establishment. <i>INCLUDE</i> such persons whether working full-time or part-time. <i>INCLUDE</i> employees on sick leave, paid vacation or holidays.	////	////	////	////	////	////
2.1.1 OPERATIVES (DIRECT PRODUCTION EMPLOYEES)	<u>Employees</u> directly engaged in production or production related activities in the establishment. <i>INCLUDE</i> persons engaged in fabricating, Processing or assembling, Mechanics who attend to the machines, shop cleaning personnel, warehousemen, packers, shop-testing and record keeping personnel and paid apprentices. <i>INCLUDE</i> any supervisory personnel whose function is to record or expedite any step in the production process. <i>EXCLUDE</i> supervisory employees above the working foreman level.	////	////	////	////	////	////
2.1.2 OTHER EMPLOYEES	Employees other than operatives as defined above, eg. administrative, clerical and accounts personnel such as salaried managers, clerks, typists and salesmen.	////	////	////	////	////	////
2.2 UNPAID WORKERS							
2.2.1 WORKING PROPRIETORS AND ACTIVE BUSINESS PARTNERS	Proprietors and partners who are actively engaged in the management of the establishment and are not paid a salary or wage. (Managers and directors of co-operations working for pay should be reported with "other employees").	////	////	////	////	////	////
2.2.2 LEARNERS	<i>INCLUDE</i> all persons undergoing on the job training without pay, including unpaid apprentices.	////	////	////	////	////	////
2.2.3 UNPAID FAMILY WORKERS	Family members of any of the owners who work in the establishment without regular pay for at least one third of the normal working period.	////	////	////	////	////	////
2.3 TOTAL (sum of 2.1.1, 2.1.2, 2.2.1, 2.2.2 and 2.2.3)							

Example

CONSTRUCTION (QUESTIONNAIRE 5)

<u>SECTION 2: EMPLOYMENT AND EARNINGS</u>		2003 PEAK PERIOD			2004 PEAK PERIOD		
		TOTAL	MALE	FE- MALE	TOTAL	MALE	FE- MALE
2. PERSONS ENGAGED							
State the number of persons engaged in the following categories during the peak period in 2003 and 2004.							
2.1 EMPLOYEES							
All persons working for and paid by the unit.		////	////	////	////	////	////
<i>INCLUDE</i> such persons whether working full-time or part-time.		////	////	////	////	////	////
<i>INCLUDE</i> employees on sick leave, paid vacation or holidays.		////	////	////	////	////	////
2.1.1 OPERATIVES (DIRECT CONSTRUCTION EMPLOYEES)							
Employees directly engaged in construction or construction related activities in the unit.		////	////	////	////	////	////
<i>INCLUDE</i> persons engaged as masons, carpenters, labourers, working foremen, time keepers, equipment operators, mechanics, paid apprentices and job site record keepers.		////	////	////	////	////	////
<i>INCLUDE</i> any supervisory personnel whose Function is to record or expedite Any step in the production Process.		////	////	////	////	////	////
<i>EXCLUDE</i> supervisory employees above the Working foreman level.		////	////	////	////	////	////
2.1.2 OTHER EMPLOYEES							
Employees other than operatives as defined above, eg. architects, engineers, administrative, clerical and accounts personnel such as salaried managers, clerks, typists and supervisory employees above the working foreman level.		////	////	////	////	////	////
2.2 UNPAID WORKERS							
2.2.1 WORKING PROPRIETORS AND ACTIVE BUSINESS PARTNERS							
Proprietors and partners who are actively engaged in the management of the establishment and are not paid a salary or wage. (Managers and directors of co-operations working for pay should be reported with "other employees").		////	////	////	////	////	////
2.2.2 LEARNERS							
<i>INCLUDE</i> all persons undergoing on the job training without pay, including unpaid apprentices.		////	////	////	////	////	////
2.2.3 UNPAID FAMILY WORKERS							
Family members of any of the owners who work in the establishment without regular pay for at least one third of the normal working period.		////	////	////	////	////	////
2.3 TOTAL (sum of 2.1.1, 2.1.2, 2.2.1, 2.2.2 and 2.2.3)							

QUESTION 3: NUMBER OF EMPLOYEES AT THE END OF EACH QUARTER IN 2003

The purpose of this question is to determine the average number of persons employed for the year since the number of person employed given in question 2 may not be typical of the whole year. Record the numbers provided in the respective columns. The total in column 3 should be equal to the sum of the corresponding numbers in columns 1 and 2 on each row.

Example

3. NUMBER OF EMPLOYEES AT THE END OF EACH QUARTER IN 2003									
State the number of operatives, (direct production/construction workers) and other employees at the dates specified below.									
<i>EXCLUDE</i> all unpaid workers, i.e. working proprietors and active business partners, unpaid family workers and learners.									
	NUMBER OF OPERATIVES (DIRECT PRODUCTION/ CONSTRUCTION WORKERS)			NUMBER OF OTHER EMPLOYEES			TOTAL (column 1 + column 2)		
	1			2			3		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
3.1 31st March									
3.2 30th June									
3.3 30th September									
3.4 31st December									
FOR OFFICE USE									

QUESTION 4: WAGES AND SALARIES (CASH AND IN KIND) PAID TO EMPLOYEES DURING FINANCIAL YEAR 2003

Wages and salaries should relate to employees' gross remuneration; that is, the total amount before any deductions are made by the employers in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues and other obligations of the employees. Record the total amount i.e. Cash and in-kind (in million cedis) in the space provided. Note that two columns have been provided. Column 1 is for "Cash" payments and Column 2 for payments "In Kind".

"In-Kind" payment means that cost to be employer of goods and services furnished to employees free of charge or at markedly reduced cost.

Examples of in-kind payments are:

- Free or subsidized medical expenses
- Free or subsidized transport
- Free or subsidized meals
- Free or subsidized housing

They include the establishment's products provided to employees free or at markedly reduced rates.

Note that transport allowances, housing allowances, lunch allowance are not payments in-kind. These are cash payment to the employee and are to be included under cash payments.

Example

4. WAGES AND SALARIES (CASH AND IN KIND) PAID TO EMPLOYEES DURING THE 2003 FINANCIAL YEAR

State all payments, whether in cash or in kind, to employees for work done during the 2003 financial year. In-kind refers to the estimated net cost to the employer of those goods and services furnished to employees free of charge or at markedly reduced cost.

ALL CASH PAYMENTS (Column 1)

INCLUDE wages and salaries, other cash payments, e.g. bonuses and cost of Living allowances.

INCLUDE wages paid during vacation and sick leave.

INCLUDE contributions payable by the employees and deducted by the employer such as the Social Security and National Insurance Trust contributions, taxes, group insurance premium and the like.

GOODS AND SERVICES FURNISHED (Column 2)

INCLUDE estimated cost of subsidized housing, transport, medical care, free Uniforms, goods and the like.

CATEGORY OF EMPLOYEES	WAGES AND SALARIES	
	ALL CASH PAYMENTS (MILLION CEDIS) 1	GOODS AND SERVICES FURNISHED IN KIND (MILLION CEDIS) 2
4.1 Operatives (Direct Production/ Construction Workers)		
4.2 Other employees		
4.3 TOTAL (sum of 4.1 and 4.2)		

QUESTION 5: SUPPLEMENTS TO WAGES AND SALARIES DURING FINANCIAL YEAR 2003 (NOT INCLUDED IN QUESTION 4)

Record the total amount of money spent on supplements to wages and salaries (in million of cedis) in the spaces provided. The definition of supplements includes employers' contribution on behalf of employees to the Social Security and National Insurance Trust (SSNIT), private pension plans and workmen's accident compensation plans etc. Include payments to all such schemes whether legally required, initiated by the employer, or established as a result of a labour management bargaining contract.

Example

5. SUPPLEMENTS TO WAGES AND SALARIES DURING THE 2003 FINANCIAL YEAR

(These items are not included in Question 4).

INCLUDE employer's contribution on behalf of employees to the Social Security and National Insurance Trust (SSNIT), private pension plans, workmen's accident compensation plans and insurance premiums on hospital and medical schemes and the like.

(MILLION CEDIS)

5.1 SSNIT	
5.2 Others	
5.3 TOTAL	

QUESTION 6: NUMBER OF MAN DAYS WORKED BY OPERATIVES DURING THE 2003 FINANCIAL YEAR

INCLUDE the total number of days spent by operatives (direct production workers) working for the establishment and not the number of days paid for .

INCLUDE days worked as overtime by operatives. If overtime data is in hours convert to days by dividing the number of overtime hours by the number of working hours per day.

EXCLUDE days spent on vacation, holiday, casual or sick leave by operatives.

The number of days worked in a year may not be the same for all operatives. In this case operatives who worked the same number of days should be grouped together. The calculation required can then be made for each group.

Example

Group 1: 5 operatives x 205 working days = 1025 man days
Group 2: 10 operatives x 230 working days = +2300 man days
Total = 3325 man days

Record the number of man days worked by operatives during the financial year 2003 in space provided.

Number of man days is not asked in the Construction questionnaire.

Example

6. NUMBER OF MAN DAYS WORKED BY OPERATIVES DURING THE 2003 FINANCIAL YEAR	
<i>INCLUDE</i>	the total number of days spent by operatives (direct production workers) working for the establishment and not the number of days paid for.
<i>INCLUDE</i>	all days worked as overtime by operatives. If overtime data is in hours, convert to days by dividing the number of overtime hours by the number of working hours per day.
<i>EXCLUDE</i>	days spent on vacation, holiday, casual or sick leave by operatives.
<i>EXAMPLE</i>	The number of days worked in a year may not be the same for all operatives. In this case operatives who work the same number of days should be grouped. The calculation required can be made for each group, e.g. Group 1: 5 operatives x 205 working days = 1025 man days Group 2: 10 operatives x 230 working days = <u>2300 man days</u> TOTAL = 3325 man days
TOTAL NUMBER OF MAN DAYS WORKED BY OPERATIVES	

SECTION 3: STOCKS

QUESTION 7: STOCKS OF THIS ESTABLISHMENT

Introduction

Manufacturers for the most part buy raw materials and make them up into finished goods. The establishment at any stocktaking time will have stocks of both raw materials and FINISHED GOODS in hand. In addition the establishment is bound to have a stock of goods which are neither in the raw material state, nor in the finished goods state. Such partly finished goods are called WORK IN PROGRESS. In Ghana many small establishments work to order. Only when goods are ordered do they purchase raw materials. The goods are released immediately they are paid for. In this situation stocks of raw materials

or finished goods are minimal or do not exist. However, if an order is being worked on there will be work in progress.

DEFINITIONS

7.1 Stocks Of Materials And Supplies

This item comprises the value of stocks of all materials, parts and components that enter into the product, office and other consumable supplies.

INCLUDE

- (a) The value of all stocks held at the establishment itself or in other ancillary locations such as warehouses.
- (b) Include materials owned by the establishment but held by others for processing.
- (c) The value of stocks of raw materials and supplies for use in construction work undertaken for the establishment's own use.

The valuation of raw materials and supplies should be at purchaser's prices and should be on the same basis for both beginning and end of the year. Book values may be reported as an alternative to purchaser's prices.

EXCLUDE

Materials owned by others but held by the establishment for processing.

7.2 Work In Progress

This item refers to the value of all materials which have been partially processed by the establishments, but which are not usually sold, transferred or turned over to other establishments without further processing.

INCLUDE

- (a) All work in progress for the account of others irrespective of the arrangements for financing the work.
- (b) Work in progress on own account production of machinery and equipment.

EXCLUDE

Own account construction work (this is treated as part of fixed capital formation).

7.3 Fuel

INCLUDE

Value of all stocks of fuel held by the establishment or for the establishment. Valuation should be at purchasers' prices (delivered cost).

7.4 Finished Goods

INCLUDE

- (a) All goods produced by the establishment which are ready for sale or transfer at the end of the financial year.
- (b) Finished goods produced and held by another establishment from materials owned by the respondent establishment. (This situation will not often occur in Ghana).

EXCLUDE

Finished goods held by respondent establishment which were made from materials owned by others.

7.5 Goods for Resale

INCLUDE

- (a) Goods and materials expressly bought to be sold in the same condition as purchased.
- (b) Stocks of materials and supplies to be resold without further processing which were not originally purchased for that purpose.

VALUATION OF STOCKS

Valuation of stock items has been indicated on the questionnaire. In principle, materials, supplies and fuel are to be valued at current purchasers' prices. Work-in-progress is to be valued at cost of materials.

Finished goods for resale are to be valued at ex-factory prices. In the field the enumerator will often have to accept book values.

Book Values are the initial cost of items at time of purchase.

Purchasers' Prices (Delivered Cost)

Purchasers' prices are the delivered value at the establishment including the purchase price, charges for transport, the cost of insurance, the value of packaging materials charged for, and taxes and duties on the goods. Discounts or rebates, allowed to the purchaser and the value of packaging materials returned to suppliers should be deducted.

Ex-factory Prices (Producers' Prices)

This is the establishment price charged to the customer
INCLUDE all duties and taxes which fall on products when they leave the establishment.
EXCLUDE any subsidies.

Example

<u>SECTION 3: STOCKS</u>		
7. STOCKS OF THIS ESTABLISHMENT DURING THE 2003 FINANCIAL YEAR		
<i>INCLUDE</i>	the value of all stocks held at the establishment itself or in Ancillary locations such as warehouses.	
<i>INCLUDE</i>	materials owned by this establishment but held by others for processing.	
<i>EXCLUDE</i>	materials owned by others but held by this establishment for processing.	
<i>VALUATION</i>	should be at prices specified in the questions, on comparable basis for both beginning and end of year. Alternatively, book values may be given.	
DEFINITIONS		
<i>PURCHASERS' PRICES</i>	The delivered cost at the establishment including the purchase price, charges for transport, the cost of insurance, the value of packaging materials charged for and all taxes and duties on the goods. Discounts or rebates allowed to the purchaser and the value of Packaging materials returned to suppliers should be deducted.	
<i>EX-FACTORY PRICES (Producers' prices)</i>	The establishment price charged to the consumer.	
<i>INCLUDE</i>	duties and taxes which fall on products when they leave the establishment.	
<i>EXCLUDE</i>	any subsidies.	
TYPE OF STOCK	VALUE OF STOCKS (MILLION CEDIS)	
	AT BEGINNING OF FINANCIAL YEAR 1	AT END OF FINANCIAL YEAR 2
7.1 Materials and supplies (at current replacement cost in purchasers' prices)		
7.2 Work in progress (in purchasers' prices)		
7.3 Fuel (in purchasers' prices)		
7.4 Finished goods (at ex-factory prices)		
7.5 Goods and materials expressly bought to be sold in the same condition as purchased (at ex-factory prices).		
7.6 TOTAL (sum of 7.1 to 7.5)		

Estimation Procedure

A stock estimation procedure for small establishments (under 30 persons engaged) is set out in the supplement to the enumerator's manual.

SECTION 4: FIXED CAPITAL FORMATION

Purpose

This section is intended to obtain information on any additions to or disposal of the assets of the establishment during the financial year.

Don't be put off by the title. Fixed capital formation means additions to land, buildings, machinery and transport equipment.

Section 4 is organized around two questions:

Question 8: Value of fixed assets and depreciation allowed during the 2003 financial year.

Question 9: Additions to and sales of fixed assets during the 2003 financial year.

QUESTION 8: VALUE OF FIXED ASSETS AND DEPRECIATION ALLOWED DURING THE 2003 FINANCIAL YEAR

This question is soliciting information on the book value of the establishment's land, buildings, machinery and transport equipment (fixed assets) at the beginning of the 2003 financial year (column 1), and depreciation allowed on each item (column 2).

Depreciation is the value of wear and tear of fixed assets in the course of the financial year. The full definition of depreciation, as stated on the questionnaire is "value allowed at current replacement cost of assets used up during the year through normal wear and tear, foreseen obsolescence and the normal rate of accidental damage". Do not attempt to estimate depreciation for the respondent. If he/she cannot estimate it, write a note saying so and attach it to the questionnaire.

Example

SECTION 4: FIXED CAPITAL FORMATION		
8. VALUE OF FIXED ASSETS AND DEPRECIATION ALLOWED DURING THE 2003 FINANCIAL YEAR		
Enter the book value of fixed assets at the beginning of the financial year and depreciation allowed at current replacement cost of assets used up during the year through normal wear and tear, foreseen obsolescence and the normal rate of accidental damage.		
ASSETS	BOOK VALUE AT THE BEGINNING OF YEAR (MILLION CEDIS) 1	DEPRECIATION (MILLION CEDIS) 2
8.1 Land		//////////////////// ////////////////////
8.2 Buildings, other construction and land improvements		
8.3 Machinery and other equipment (except transport)		
8.4 Transport equipment		
8.5 TOTAL (sum of 8.1 to 8.4)		

**QUESTION 9. ADDITIONS TO AND SALES OF FIXED ASSETS DURING THE
2003 FINANCIAL YEAR**

The purpose of this question is to calculate the establishment's gross fixed assets. This calculation is done in the office, and is the sum of values in column 1, 2, 3 and 4 less the value in column 5. Note that the enumerator does not do this calculation. Column 6 is *for office use only*. Land, strictly speaking, is not a fixed asset. However, for the purpose of this census land is being included in this question. The value of land purchased is to be included in Question 9.1 Column 2. Note that the value of improvements to land such as roads, fences etc. is classed as construction work and is included with buildings, other construction and land improvements in Question 9.2.

Complete the question as follows:

COLUMN 1. Cost of New Fixed Assets Purchased

INCLUDE

the cost of New Fixed Assets acquired by the establishment during the 2003 financial year. That is, the cost of fixed assets acquired that have not previously been used in Ghana. All assets imported into Ghana are to be entered as new fixed assets regardless of whether they have previously been used.

COLUMN 2 Cost of Second Hand Fixed Assets Purchased

INCLUDE

the cost of secondhand fixed assets acquired by the establishment during the 2003 financial year. That is, the cost of fixed assets acquired that have previously been used in Ghana.

COLUMN 3 Additions, Renovations and Improvements Purchased From Others

INCLUDE

the cost of major additions, alterations and improvements to existing fixed assets that extend their normal economic life or raise their productivity. (This item does not include current repair and maintenance which is included in question 12.5)

COLUMN 4 Cost Of Work Done On Own Account

INCLUDE

the cost of work done by own labour force on new fixed assets, additions and improvements to existing fixed assets during the 2003 financial year.

COLUMN 5 Value Of Sales Of fixed Assets

INCLUDE

the value of sales of all fixed assets during the 2003 financial year.

COLUMN 6 Gross Additions To Fixed Assets

Do not complete, Leave for office use.

VALUATION

Value at full cost incurred, that is at delivered cost plus the cost of installation including any fees and taxes but excluding financing costs.

Example

9. ADDITIONS TO AND SALES OF FIXED ASSETS DURING THE 2003 FINANCIAL YEAR

NEW FIXED ASSETS (Column 1)

INCLUDE the cost of new fixed assets acquired by the establishment during the 2003 financial year. That is, the cost of fixed assets acquired that have not previously been used in Ghana. All assets imported into Ghana are to be entered as new fixed assets, regardless of whether they have been used previously.

SECONDHAND FIXED ASSETS (Column 2)

INCLUDE the cost of secondhand fixed assets acquired by the establishment during the 2003 financial year. That is, the cost of fixed assets acquired that have previously been used in Ghana.

ALTERATIONS, RENOVATIONS, etc. (Column 3)

INCLUDE the cost of alterations, renovations and improvements to existing Fixed assets purchased from others during the 2003 financial year.

WORK DONE ON OWN ACCOUNT (Column 4)

INCLUDES the cost of work done by own labour force on additions and Improvements to existing fixed assets during the 2003 financial year.

SALES OF FIXED ASSETS (Column 5)

INCLUDE the value of sales of fixed assets during the 2003 financial year.

FOR OFFICE USE (Column 6)

Do not complete. Leave for office use.

VALUATION Value at full cost incurred, that is at delivered cost plus the cost of installation including any fees and taxes but excluding financial costs.

	COST OF ADDITIONS TO FIXED ASSETS (MILLION CEDIS)				VALUE OF SALES OF FIXED ASSETS (MILLION CEDIS)	FOR OFFICE USE
	NEW FIXED ASSETS PURCHASED	SECONDHAND FIXED ASSETS PURCHASED	ALTERATIONS, RENOVATIONS & IMPROVE- MENTS OF FI- XED ASSETS PURCHASED FROM OTHERS	WORK DONE ON OWN ACCOUNT		
	1	2	3	4	5	6
9.1 Land	///////// /////////		///////// /////////	///////// /////////		
9.2 Buildings other construc- tion and land improve- ments						
9.3 Machinery & equip- ment (except transport)						
9.4 Transport equipment						
9.5 TOTAL (sum of 9.1 to 9.4)						

Example

9. COST OF NEW FIXED ASSETS ACQUIRED DURING THE 2003 FINANCIAL YEAR

NEW FIXED ASSETS (Column 1)

INCLUDE the cost of new fixed assets acquired by the unit during the 2003 financial year. That is, the cost of fixed assets acquired that have not previously been used in Ghana. All assets imported into Ghana are to be entered as new fixed assets, regardless of whether they have been used previously.

SECONDHAND FIXED ASSETS (Column 2)

INCLUDE the cost of secondhand fixed assets acquired by the unit during the 2003 financial year. That is, the cost of fixed assets acquired that have previously been used in Ghana.

WORK DONE ON OWN ACCOUNT (Column 3)

INCLUDES the cost of work done by own labour force on additions and improvements to existing fixed assets during the 2003 financial year.

FOR OFFICE USE (Column 4)

Do not complete. Leave for office use.

VALUATION Value at full cost incurred, that is at delivered cost plus the cost of installation including any fees and taxes but excluding financial costs.

	COST OF ADDITIONS TO FIXED ASSETS (MILLION CEDIS)			FOR OFFICE USE
	NEW FIXED ASSETS PURCHASED	SECOND HAND FIXED ASSETS PURCHASED	WORK DONE ON OWN ACCOUNT	
	1	2	3	4
9.1 Land	//////////////////// ////////////////////		//////////////////// ////////////////////	
9.2 Buildings, other construction and land improvements.				
9.3 Machinery and equipment (except transport).				
9.4 Transport equipment.				
9.5 TOTAL (sum of 9.1 to 9.4)				

SECTION 5: INPUT COSTS

This section of the questionnaire deals with the cost of materials and supplies, fuels and electricity purchased by the establishment as well as payments for industrial services rendered to the establishment by others in the 2003 financial year. The section is organized into 4 questions as follows:

- Question 10: Quantity and cost of principal materials purchased
 Question 11: Fuels purchased
 Question 12: Cost of materials, supplies, fuels, electricity, contract work, etc.
 Question 13: Cost of non-industrial services used

Each of these questions is discussed in more detail below.

QUESTION 10: QUANTITY AND COST OF PRINCIPAL MATERIALS PURCHASED DURING THE 2003 FINANCIAL YEAR.

This is a compound question, but it is not difficult to understand what is required in the columns. Its purpose is to obtain a description of the principal materials purchased by the establishment, the quantity and value and the source (whether they materials were of domestic or foreign origin).

The Stub

Your respondent should be able to give you a concise and accurate description of all principal materials purchased. Write these descriptions in lines 10.1 to 10.9 of the stub. The spaces provided from 10.1 to 10.9 cover only 9 principal materials. If more than 9 materials were purchased, the total cost of all other materials purchased but not listed among the 9 materials is to be added to auxiliary materials purchased and entered in line 10.10. The total in line 10.11 is the sum of all materials and supplies purchased during the 2003 financial year.

Column 1:

This is for use at head office. Do not enter anything in this column.

Column 2: **Unit of Measure**

Enter the unit of measure that the respondent uses. Some may use imperial system of measure (e.g. yards, gallons etc.) while others may use metric system of measure (e.g. kilograms, litres, metres etc). Enter whichever they use. Conversions will be done at head office.

Column 3: **Total Quantity Purchased**

Enter the total quantity of each principal material purchased.

Column 4: **Average Unit Price**

Enter the average unit price (in cedis) of each principal material purchased.

Column 5: **Total Delivery Cost**

Enter the total delivered cost (see note below) of each principal material purchased. Note also that the delivered cost in column 5 should be equal to the sum of entries in columns 6 and 7.

Delivered Cost (Purchasers' Prices)

Delivered cost includes the purchase price, charges for transport, cost of insurance, the value of packaging materials charged for and all taxes and duties on the goods. Discounts or rebates allowed to the purchaser and the value of packing material returned to the suppliers should be deducted.

Column 6: **Delivered Cost of Materials of Domestic Origin**

Enter the delivered cost of each material of domestic origin purchased. These include the value of all materials produced in Ghana.

Column 7: **Delivered Cost of Materials of Foreign Origin**

Enter the delivered cost of each principal material of foreign origin purchased. Note that foreign origin here refers to materials not produced in Ghana. Include the value of purchase of imported materials (i.e. produced in a foreign country), regardless of whether they were purchased in Ghana or not.

Note that the total delivered cost in column 5 as well as the delivered costs of both domestic and foreign origins in columns 6 and 7 are to be in millions of cedis and converted to two (2) places of decimal.

Example

SECTION 5: INPUT COSTS

10. QUANTITY AND COST OF PRINCIPAL MATERIALS PURCHASED DURING THE 2003 FINANCIAL YEAR

Complete a separate line for each principal material purchased. Enter balances of purchased in line 10.10 columns 5, 6 and 7 and total values in line 10.11 columns 5, 6 and 7.

INCLUDE all raw materials, fabricated parts and components, etc. received during the 2003 financial year.

INCLUDE materials and components used in own account production of fixed assets or used by other establishments in making products for this establishment under contract.

INCLUDE fuels that enter the products directly or are used to generate electricity.

EXCLUDE deductible Value Added Tax (VAT)

VALUATION should be in purchasers' prices (defined in question 7)

Materials of **DOMESTIC ORIGIN** include all materials produced in Ghana.

Materials of **FOREIGN ORIGIN** include all materials imported into Ghana (i.e. produced in a foreign country) irrespective of whether they were purchased in Ghana or not.

DESCRIPTION OF PRINCIPAL MATERIALS	FOR OFFICE USE	UNIT OF MEASURE	MATERIALS PURCHASED DURING THE 2003 FINANCIAL YEAR				
			TOTAL QUANTITY	AVERAGE UNIT PRICE (CEDIS)	TOTAL DELIVERED COST (MILLION CEDIS)	ORIGIN OF MATERIALS	
						DOMESTIC	FOREIGN
						DELIVERED COST (MILLION CEDIS)	DELIVERED COST (MILLION CEDIS)
1	2	3	4	5	6	7	
10.1							
10.2							
10.3							
10.4							
10.5							
10.6							
10.7							
10.8							
10.9							
10.10 All other materials purchased not listed individually above & auxiliary materials purchased for the production process, such lubricants, water, polishes, office supplies, ready-made containers and packing materials	////////	////////	////////	////////			
10.11 TOTAL (sum of 10.1 to 10.10)	////////	////////	////////	////////			

QUESTION 11: FUELS PURCHASED DURING THE 2003 FINANCIAL YEAR

The purpose of this question is to make available data on the principal types of fuel purchased in the industrial sector during the 2003 financial year.

INCLUDE: all fuels purchased for transport and machines.

EXCLUDE:

- (a) fuels produced and consumed in the same establishment
- (b) fuels purchased as raw materials to enter the products of the establishment as well as fuels used to generate electricity.

Record the unit of measure, quantity and delivered cost for each type of fuel purchased in columns 1, 2 and 3 respectively. Any other type of fuel not listed should be specified in the space provided. Complete the total for delivered cost of all fuels purchased. Note that the total delivered cost in column 3 is to be in millions of cedis and converted to two (2) places of decimal.

Example

11. FUELS PURCHASED DURING THE 2003 FINANCIAL YEAR			
State in delivered cost.			
<i>INCLUDE</i> fuel for transport and machines.			
<i>EXCLUDE</i> (a) fuels produced and consumed in the same establishment.			
(b) fuels purchased as raw material to enter into the products of the establishment as well as fuels used to generate electricity (These are entered in question 10).			
	UNIT OF MEASURE 1	QUANTITY 2	DELIVERED COST (MILLION CEDIS) 3
11.1 Diesel oil			
11.2 Petrol			
11.3 Wood			
11.4 Gas (LPG)			
11.5 Charcoal			
11.6 Other (specify)			
11.7 TOTAL (sum of 11.1 to 11.6)			

QUESTION 12: COST OF MATERIALS, SUPPLIES, FUELS, ELECTRICITY, CONTRACT WORK ETC. DURING THE 2003 FINANCIAL YEAR

12.1 This section of the question collects the delivered cost of materials and supplies to the establishment.

Materials And Supplies Include:

- 1. All raw materials and fabricated parts and components that enter into the products made by this establishment.
- 2. Fuels that are used as raw materials and also fuel used for generating electricity. (But not fuel used for running of machines and transport).

3. Auxiliary materials consumed in the production process such as lubricants, water, explosives, polishes and office supplies.
4. Ready made containers and packaging materials that have been purchase by the establishment as well as raw materials purchased for the manufacture of these packing by the establishment.

12.2 Fuels Purchased

This is fuel purchased for the running of machines and transport. Do not include any fuel used as a raw material in making a product or fuel used for the generation of electricity.

12.3 Electricity Purchased

The cost of electricity purchased

12.4 Cost of Contract and Commission Work Done for you by Others on your Materials

This covers payments made by the establishment for contract and commission work done by others on materials controlled by the establishment. This is not very common in Ghana.

12.5 Cost of Current Repair and Maintenance Work Done for you by Others

This covers the total cost of current repair and maintenance services on buildings and other fixed assets of the establishment provided by others. Current repair and maintenance services are those required to make good, any breakage or to keep fixed assets in proper working condition.

12.6 Cost of Goods Expressly Bought to be Sold in the Same Condition as Purchased

This refers to the cost of goods purchased to be sold without any transformation or processing.

12.7 Other Costs

This refers to all other costs (except cost of non-industrial services) incurred during the 2003 financial year.

12.8 Total

The sum of items 12.1 to 12.7. Check that the items add to the total in 12.8.

NOTE: *“Cost of hiring plant and equipment” does not appear here.*

Example

12. COST OF MATERIALS, SUPPLIES, FUELS, ELECTRICITY, CONTRACT WORK, etc. DURING THE 2003 FINANCIAL YEAR.

VALUATION should be in purchasers' prices (defined in question 7).

TYPE OF COST	DELIVERED COST AT ESTABLISHMENT (MILLION CEDIS)
12.1 Materials, supplies, etc. purchased (same as 10.11 col. 5)	
12.2 Fuels purchased (same as 11.7 col. 3)	
12.3 Electricity purchased	
12.4 Cost of contract and commission work done by others on your materials.	
12.5 Cost of current repair and maintenance work done for you by others.	
12.6 Cost of goods expressly bought to be sold in the same condition as purchased.	
12.7 Other costs.	
12.8 TOTAL (sum of 12.1 to 12.7)	

QUESTION 13: COST OF NON-INDUSTRIAL SERVICES DURING THE 2003 FINANCIAL YEAR

This question covers payments made by the establishment during the 2003 financial year for operating costs related to services of a non-industrial nature, such as communication costs, rental payments for building and machinery, advertising costs and bank charges. Non-industrial services vary a great deal between establishments. The enumerator should ask whether there are any other costs and if so, lump all such costs together and put it in the space provided (Question 13.10). Note that all the individual costs are to be converted to millions of cedis and to two (2) decimal places.

Example

13a. OTHER OPERATING COSTS AND COST OF NON-INDUSTRIAL SERVICES DURING THE 2003 FINANCIAL YEAR

Enter the following types of individual costs and under 13.10, include:

Labour costs not included in compensation of employees, purchases of provisions and supplies for sale in employee facilities. Amount paid for storage or warehousing.

INCLUDE Cost of legal, accountancy, consulting, planning, patent and license fees, printing costs, newspaper and periodical subscriptions, cost of representation, entertainment, traveling and subsistence, meetings of governing bodies, shareholders, clearing costs, waste disposal and indirect outlays for purposes of financing the acquisition of fixed assets, e.g. flotation costs and service charges in respect of loans.

EXCLUDE Purchase of land and other capital goods.

EXCLUDE Dividends and interest paid, donations, bad debts, depreciations and outright purchase of patents and licenses.

DESCRIPTION OF SERVICE	COST (MILLION CEDIS)
13.1 Communication costs (telephone, fax, telex, etc.).	
13.2 Rental payments for buildings and machinery (without an operator)	
13.3 Advertising costs	
13.4 Bank charges (excluding interest payments).	
13.5 Interest payments	
13.6 Customs duties	
13.7 Export Levy	
13.8 Value Added Tax (VAT)	
13.9 Research and Development Services	
13.10 All other items not listed individually above	
13.11 TOTAL (sum of 13.1 to 13.10)	

13b. PAYMENTS TO SUB-CONTRACTORS FOR WORK DONE

	(MILLION CEDIS)
TOTAL payments to sub-contractor for work done	

To be answered for only Construction Enterprise and covers all payments made to Sub-contractors for work done during 2003 financial year.

EXCLUDE cost of raw materials purchased for sub-contractors.

SECTION 6: SALES AND OTHER RECEIPTS OF THIS ESTABLISHMENT

This section measures the value of the establishment's gross output. Gross output refers to receipts for the sale and transfer of products, and receipts for industrial and non industrial services. This section of the questionnaire is divided into four questions as follows:

Question 14. Value of production and sale of principal products during the 2003 financial year

Question 15. Value of sales and receipts for industrial services during the 2003 financial year

Question 16. Industrial capacity utilization

Question 17. Receipts for non-industrial services to others during the 2003 financial year.

NOTE:

- **No Sales For Construction – only receipts for construction work done.**
- **No Capacity Utilization for Construction enterprise.**

QUESTION 14 VALUE OF PRODUCTION AND SALE OF PRINCIPAL PRODUCTS DURING THE 2003 FINANCIAL YEAR

This is a compound question but it is not difficult to understand what is required in the columns. The purpose of the question is to obtain a description of the main products of the establishment, the quantity and value and the value of domestic sales and exports.

The Stub

Enter a description of the establishment's products in lines 14.1 to 14.9. Your respondent should be able to give you a concise description of the products of the establishment. In line 14.10 enter the total value of all other sales. In line 14.11 enter the total value for columns 6, 7, 8 and 9. Make sure that lines 14.1 to 14.10 add up to 14.11.

Column 1 For Head Office Use

Do not write anything in this column. It is for head office use.

Column 2 Unit of Measure

Enter that unit of measure, as stated by the respondent. Some will use imperial system of measures (yards, gallons, etc.) and others metric system of measures (kilograms, metres, etc.). Enter whichever is used. Conversions will be done at the head office.

Column 3. Full Production Capacity (Quantity)

Enter the full production capacity of the establishment for a single production line using existing plant and machinery. This will usually be greater than the quantity in column. 4. If it is equal to or less than the quantity in column 4 you should check this with the respondent.

NOTE:

Column 3 should be completed by establishments using different production lines for individual products. Establishments using the same plant for a number of products should complete question 16.

For each Principal Product, complete the following:

Column 4. The Quantity Produced

Enter the total quantity for each principal product.

Column 5 Average Unit Price

Enter the average unit price for each principal product.

Column 6. Total Value Of Production

Enter the Total Value for each principal product

Column 7 Total Value of Sales

Enter the total value of sales for each principal product

Column 8 Value of Domestic Sales

Enter the value of sales for each principal product sold within Ghana.

Column 9 Value of Exports

Enter the value of sales for each principal product exported.

EXCEPTIONS TO CONSTRUCTION ENTERPRISES

Construction enterprises are not into sales and so would not have receipts for sales. The value of their output is therefore required. The output of the enterprise includes all construction activity carried out by the unit. Own-account construction of the enterprise is also included.

14.1a New construction including extensions

This refers to the erection of an entirely new structure whether or not the site on which it is built was previously occupied. Extensions should also be included. A building should be regarded as residential when the major part (more than half of its gross floor area) is built for dwelling purposes. Other buildings should be regarded as non-residential. Other Construction Work refers to all (civil engineering work) construction work other than building.

14.1b Repairs and maintenance

- i. Capital repairs include restoration and conversions. This category include Construction work by which the utilities of buildings or other structures is raised or at least renewed (i.e. extend the normal life of these fixed assets).

Restoration means, repairs by which, at least one structure is re-instated and where the substantial parts of the existing structure are used.

Conversion relates to structural changes carried out within a building.

- ii. Current repairs and maintenance include work done which in principle does not result in extending the normal life but only prevents abnormal deterioration and keeps the structures in a state of normal functioning.

14.2a Value of construction work carried out by construction unit as a sub-contractor.

The value relates to all work done which were sub-contracted to the unit by another enterprise.

14.2b Value of construction work carried out on own account.

This relates to the value of all other construction work carried out by the unit using its own materials.

14.3 Grand Total (Sum of 14.1a, 14.1b and 14.2c)

Add the sub-totals in questions 14.1a, 14.1b and 14.2c.

Example (Manufacturing)

SECTION 6: SALES AND OTHER RECEIPTS OF THIS ESTABLISHMENT

14. VALUE OF PRODUCTION AND SALE OF PRINCIPAL PRODUCTS DURING THE 2003 FINANCIAL YEAR

Complete a separate line for each principal product. Enter balance of sales in line 14.10 and total values in line 14.11

INCLUDE all duties and taxes on products when they leave the establishment.

INCLUDE products made elsewhere for this establishment on a contract basis from materials supplied by this establishment.

EXCLUDE transport charges to the purchaser or user and any subsidies received by the establishment.

VALUATION should be at ex-factory prices (defined in question 7).

FULL PRODUCTION CAPACITY (*Column 3*).

*Establishments using different production lines for individual products should complete column 3 (full production capacity with existing plant and machinery).

Establishments using the same plant for a number of products should mark column 3 N/A (not applicable) and complete question 16: Industrial Capacity Utilization.

DESCRIPTION OF PRINCIPAL PRODUCTS	FOR OFFICE USE 1	UNIT OF MEASURE 2	FULL PRODUCTION CAPACITY (QUANTITY) 3	TOTAL PRODUCED DURING 2003 FINANCIAL YEAR			VALUE OF SALES DURING THE 2003 FINANCIAL YEAR		
				QUANTITY 4	AVERAGE UNIT PRICE (CEDIS) 5	VALUE (MILLION CEDIS) 6	TOTAL (MILLION CEDIS) 7	DOMESTIC (MILLION CEDIS) 8	FOREIGN (MILLION CEDIS) 9
14.1									
14.2									
14.3									
14.4									
14.5									
14.6									
14.7									
14.8									
14.9									
14.10 All other products not listed above	///////// /////////	///////// /////////	///////// /////////	///////// /////////	///////// /////////	///////// /////////			
14.11 TOTAL (sum of 14.1 to 14.10)	///////// /////////	///////// /////////	///////// /////////	///////// /////////	///////// /////////	///////// /////////			

Example (Construction)

SECTION 4: OUTPUT OF THIS UNIT

14. VALUE OF CONSTRUCTION WORK DONE AS A MAIN CONTRACTOR AND AS A SUB-CONTRACTOR AND ON OWN ACCOUNT DURING THE 2003 FINANCIAL YEAR

Complete a separate line for each principal construction output.

INCLUDE works carried out during the reference the basis of contracts with investors including works given out to sub-contractors and on the account of the construction unit itself.

DESCRIPTION OF PRINCIPAL CONSTRUCTION ACTIVITY	C E D I S				
	(Billions)	(Millions)	(Thousands)	(Hundreds)	(Tens)
14.1a New construction including extensions					
i. Residential buildings					
ii Non-Residential buildings					
iii Other construction work					
TOTAL					
14.1b Repairs and maintenance					
i Capital repairs (including restorations conversions)					
ii Current repairs and maintenance					
TOTAL					
14.1c GRAND TOTAL (sum totals of 14.1a & 14.1b)					

14.2 INCLUDE WORKS RECEIVED AS OTHER CONSTRUCTION WORK DONE BY A SUB-CONTRACTOR AND RE-SUBCONTRACTOR

DESCRIPTION OF OTHER CONSTRUCTION OUTPUT	C E D I S				
	(Billions)	(Millions)	(Thousands)	(Hundreds)	(Tens)
14.2a Value of construction work carried out by construction unit as a sub-contractor.					
14.2b Value of construction work carried out on own account.					
14.2c Total					
14.3 Grand Total					

QUESTION 15. VALUE OF SALES AND RECEIPTS FOR INDUSTRIAL SERVICES

15.1 Value of Sales (including Transfer of Goods)

The value of sales required for this question is the sum of receipts from sales and any transfer of goods. Receipts from sales are payments received for the sale of the establishment's products. An establishment may transfer products to another establishment within the same enterprise at less than the ex-factory price in which case they may not regard the transfer as a sale. The value of the transfer should be added to the value of sales and entered in 15.1.

VALUATION

Sales are to be valued at ex-factory prices, that is at the establishment price charged to the customer including all duties and taxes falling on products when they leave the establishment. Transfers will often be at book values.

15.2 Receipts for Contract Work Done for Others on their Materials.

Contract and commission work consist of processing, transforming or assembling of materials supplied by another establishment which orders the work. Enter in 5.2 the value of payments received for such contract work.

15.3 Receipts for Repairs and Installation Work Done for Others.

This question covers the value of repair, maintenance and installation work done for other establishments. The value of payments received for such work should be entered in 15.3.

15.4 Other Receipts For Industrial Services

All other receipts for industrial services (not mentioned in the question) rendered to others should be included in this question and their value entered in 15.4.

15.5 Sales of Goods Expressly Bought to be Sold in the Same Condition as Purchased

Include in this question the value of all goods or materials bought and sold without transforming or processing.

15.6 Value of Capital Goods Produced for Yourself

This question covers the value of new fixed assets and additions and improvements to existing fixed assets made by the establishment for its own use during the financial year 2003

15.7 Total

You should check that the values of the items add up to the total.

Example

15. VALUE OF SALES AND RECEIPTS FOR INDUSTRIAL SERVICES DURING THE 2003 FINANCIAL YEAR	
<i>VALUATION</i> should be at ex-factory prices, (defined in question 7).	
DESCRIPTION OF ITEMS	VALUE (MILLION CEDIS)
15.1 Value of sales (including any transfer of goods) (same as 14.11 column 7).	
15.2 Receipts for contract work done for others on their materials.	
15.3 Receipts for repair and installation work done for others.	
15.4 Other receipts for industrial services	
15.5 Sales of goods expressly bought to be sold in the same condition as purchased	
15.6 Value of capital goods produced for yourself (same as 9.5 column 4).	
15.7 TOTAL (sum of 15.1 to 15.6)	

QUESTION 16. INDUSTRIAL CAPACITY UTILIZATION

This question should be answered by establishments that use the same set of plant and machinery for producing a number of different products. Establishments using different production lines for individual products should complete question 16 Column 3 (full production capacity, quantity). Optimum or Full Production Capacity refers to the quantity that can be produced with existing plant and machinery if there are no interruptions in production during the 2003 financial year (e.g. interruptions caused by lack of raw materials, power cuts, machine failure, strikes etc.) Record the estimated percentage utilization in the box provided to the right. The figures should range from 001 to 100.

Industrial Capacity Utilization is not relevant in Construction enterprise and therefore this question is not asked in the Construction questionnaire.

Example

<p>16. INDUSTRIAL CAPACITY UTILIZATION (Complete if N/A is entered in 14 col. 3).</p> <p>Give an estimate of percentage UTILIZATION of optimum or full production capacity (with existing plant and machinery).</p>		<p>PERCENT</p> <table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>		

QUESTION 17. RECEIPTS FOR NON-INDUSTRIAL SERVICES TO OTHERS DURING THE 2003 FINANCIAL YEAR

This question collects the value of receipts for non-industrial services rendered to others. These services include:

- 17.1 Receipts for rental or lease of buildings and machinery (without an operator)
- 17.2 Commissions received
- 17.3 Revenue from the operation of employee facilities
- 17.4 Receipts for storage of goods, warehousing and cold storage for others
- 17.5 Receipts for transport services rendered to others (other than the delivery of own products)
- 17.6 All other similar items
- 17.7 Check that the items sum up to the Total.

Example

<p>17. RECEIPTS FOR NON-INDUSTRIAL SERVICES TO OTHERS DURING THE 2003 FINANCIAL YEAR</p> <p>Enter receipts from non-industrial services.</p> <p><i>EXCLUDE</i> the following dividends, interest or subsidies received from the Sale of used capital goods (included in capital formation).</p>	
DESCRIPTION OF SERVICES	VALUE (MILLION CEDIS)
17.1 Receipts for rental or lease of building & machinery.	
17.2 Commissions received	
17.3 Revenue from the operation of employee facilities.	
17.4 Receipts for storage of goods, warehousing, cold storage for others.	
17.5 Receipts for transport services rendered to others, (other than delivery of own products).	
17.6 All other similar items	
17.7 TOTAL (sum of 17.1 to 17.6)	

SECTION 7; ENUMERATOR’S REVIEW

These are checks designed to ensure that the questionnaires from the field are complete (i.e. all the relevant questions have been answered) and the data accurate, to avoid or reduce instances of having to go back to the field for re-enumeration. The enumerator is to review this section of the questionnaire with the respondent before the latter completes the certification of the questionnaire.

A. COMPLETENESS CHECK

This check is designed to ensure that key data items have been completed. It consists of a list of the key data items and two boxes (marked Yes and No), one of which must be marked for each data item. An explanation should be given for all data items that are marked “No”. Go through the questions one after the other in the order set out on the questionnaire. Where an answer is missing, ask the respondent to supply the data. If the respondent has a valid reason for not answering, write this down in the space provided for remarks.

Example

<u>SECTION 7: ENUMERATOR’S REVIEW</u>					
The enumerator will review your form for completeness and accuracy in the this section before having you complete the certification.					
a. COMPLETENESS CHECKS					
<i>Mark (X) in the box that applies.</i>					
Have the following questions been completed?					
QUESTION	YES	NO*	QUESTION	YES	NO*
1.3	<input type="checkbox"/>	<input type="checkbox"/>	9.5	<input type="checkbox"/>	<input type="checkbox"/>
1.5	<input type="checkbox"/>	<input type="checkbox"/>	10.11	<input type="checkbox"/>	<input type="checkbox"/>
1.6	<input type="checkbox"/>	<input type="checkbox"/>	11.7	<input type="checkbox"/>	<input type="checkbox"/>
2.3	<input type="checkbox"/>	<input type="checkbox"/>	12.8	<input type="checkbox"/>	<input type="checkbox"/>
4.3	<input type="checkbox"/>	<input type="checkbox"/>	13.11	<input type="checkbox"/>	<input type="checkbox"/>
5.3	<input type="checkbox"/>	<input type="checkbox"/>	14.11	<input type="checkbox"/>	<input type="checkbox"/>
6.0	<input type="checkbox"/>	<input type="checkbox"/>	15.7	<input type="checkbox"/>	<input type="checkbox"/>
7.6	<input type="checkbox"/>	<input type="checkbox"/>	14 Col 3 or 16	<input type="checkbox"/>	<input type="checkbox"/>
8.5	<input type="checkbox"/>	<input type="checkbox"/>	17.7	<input type="checkbox"/>	<input type="checkbox"/>

* If NO explain in "REMARKS"

REMARKS

.....

.....

B. CONSISTENCY CHECKS

The following four checks b, c, d and e are to ensure that the data collected on certain economic indicators are consistent with answers given elsewhere in the questionnaire.

b. Average Annual Wage Per Employee

The average annual wage per employee would be calculated and compared with the Government's minimum wage paid to employees in 2003. To calculate the average annual wage per employee, divide the sum of the entries in question 4.3 Column 1 and 2 (i.e. all cash payments and payments in kind), by the sum of the entries in question 2.1.1 and 2.1.2 (i.e. number of operatives and other workers). Enter the result in the space provided. If the average is less than 248,400 cedis go over the calculations once more and move on to the next check.

Example

Calculate and enter figures for checks (b, c and d).

CHECK	CALCULATIONS REQUIRED	FIGURES FOR CENSUS ('000 CEDIS)
b. Average annual wage per employee	Question 4.3 Col (1 + 2) / (sum of question 2.1.1 & 2.1.2)	

Example

c. Sales, Other Receipts, Input Costs, Wages and Salaries

This is to check whether sales and other receipts of the establishment (revenue) were greater than the costs (expenditure) during the 2003 financial year (i.e. to check whether the establishment operated at a profit during the financial year). Complete the entries in the two boxes and answer the question asked by marking the box that applies. If the box for "NO" is marked, give an explanation in the space for remarks.

c. *Sales, other receipts, input costs, wages and salaries*

<p>SALES & RECEIPTS A</p> <div style="border: 1px solid black; padding: 5px; width: 80%; margin: 0 auto;"> <p>Question 15.7</p> </div>	<p>INPUT COSTS, WAGES & SALARIES B</p> <div style="border: 1px solid black; padding: 5px; width: 80%; margin: 0 auto;"> <p>Question 4.3 col. 1</p> <p>Question 4.3 col. 2</p> <p>Question 12.8</p> <p>Total</p> </div>
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Is the answer in box A greater than the total in box B?

Mark (X) in the box that applies.

YES	NO (Explain a "NO" in 'Remarks')
<input type="checkbox"/>	<input type="checkbox"/>

REMARKS

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d. Stocks, Production And Sale of Finished Goods

The purpose of this check is to ensure that the sum of the stock of finished goods at the beginning of the year and production during the year is equal to the sum of the stock of finished goods at the end of the year and sales during the year. Complete the entries in the two boxes and answer the question asked by marking the box that applies. If the box for "NO" is marked, give an explanation in the space for remarks.

Example

d. Stocks, production and sale of finished goods.

Question 7.4 col. 1 Question 14.11 col. 6 Total	Question 7.4 col. 2 Question 14.11 col. 7 Total
---	---

Are the totals in the 2 boxes equal?

Mark (X) in the box that applies.

YES		NO (Explain a "NO" in 'Remarks')
<input type="checkbox"/>		<input type="checkbox"/>

REMARKS

.....

.....

.....

e. Equality of Answers To Some Questions

This is to ensure consistency of answers to the same question given in different parts of the questionnaire. Mark an (X) in the box that applies to each question asked. If the box for "NO" is marked for any question give an explanation in the space provided for remarks.

Example

e. Are the answers to the following questions the same?

Mark (X) in the box that applies

	YES	NO	
Question 9.5 col 4 & question 15.6	<input type="checkbox"/>	<input type="checkbox"/>	(Explain a "NO" in 'Remarks')
Question 10.11 col 5 & question 12.1	<input type="checkbox"/>	<input type="checkbox"/>	
Question 11.7 col 3 & question 12.2	<input type="checkbox"/>	<input type="checkbox"/>	
Question 14.11 col 7 & question 15.1	<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS

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.....

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SOURCE OF DATA

This will assist in the interpretation of data collected. The sources of data (box 1 to 4) have been explained at the beginning of this chapter. Mark the box that applies. If more than one box is marked indicate in the space for remarks the number of questions from each source.

Example

f. Source of Data

Mark (X) in the box/boxes that applies/apply.

<input type="checkbox"/> 1	Data derived from financial statements	<input type="checkbox"/> 3	Careful estimates
<input type="checkbox"/> 2	Other documentary sources	<input type="checkbox"/> 4	Estimates

If more than one box is marked, indicate in space for remarks the number(s) from each source.

REMARKS

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.....

.....

g. This questionnaire was completed by Mark (X) in the box that applies.

<input type="checkbox"/> 1	Respondent	<input type="checkbox"/> 2	Enumerator
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SECTION 8: CERTIFICATION OF THIS QUESTIONNAIRE

This section is to certify the authenticity of the information collected as well as enable us to know who to contact.

- (A) Respondent's Comments
Thank the respondent and ask him/her to write his/her comments in the space provided. The enumerator should write comment for the respondent if the latter cannot write.
- (B) Ask the respondent to write his/her name, telephone number (if any), signature and/or stamp, designation and date.
- (C) The enumerator as well as supervisor and regional supervisor should complete this portion of the questionnaire.
- (D) This should be left for office use.

Example

SECTION 8: CERTIFICATION OF THIS QUESTIONNAIRE

A. Thanks you for completing this questionnaire. Please enter any comments which would assist in the interpretation of the information given.

COMMENTS:

.....
.....
.....
.....
.....
.....

B. NAME OF PERSON SUPPLYING THE INFORMATION TELEPHONE NUMBER

.....

SIGNATURE:
STAMP

DESTINATION DATE

C. ENUMERATOR'S NAME ENUMERATOR'S NUMBER

DATE OF INTERVIEW

SUPERVISOR'S NAME SUPERVISOR'S NUMBER

DATE CHECKED DATE CHECKED BY REGIONAL CO-ORDINATOR

D. CLERICAL PROCESSING (FOR OFFICE USE)

EDITOR'S NUMBER SIGNATURE AND DATE

CODER'S NUMBER SIGNATURE AND DATE

VERIFIER'S NUMBER SIGNATURE AND DATE

DATE PASSED FOR DATA ENTRY SIGNATURE

GLOSSARY

ACCOUNTING PERIOD

The period covered by the firm's accounts. Usually the financial year is 1 January to 31 December, but other possibilities are:

- 1 April – 31 March
- 1 July – 30 June

ANCILLARY

Additional or extra; serving or supporting. An ancillary warehouse is a warehouse supporting the establishment.

AUXILIARY

Helper or Supporter. Auxiliary supplies are supplies that help in the process. An auxiliary machine is a machine that supports the production process.

BOOK VALUES

The values that appear in an establishment's accounting records. Where the financial statement has not been prepared, book values should be available from the accounting records.

COMMISSION

Order for something to be made. An establishment may do commission work on materials supplied by another establishment.

Payments. Payments for selling goods or rendering services, which increase with the quantity of goods sold or services rendered.

CONTRACT

An agreement to do some work. An establishment may undertake contract work for another

REFERENCE NUMBER

The number on each questionnaire that enables the movement of the questionnaire during field work and data processing to be controlled.

COVERAGE

The units counted or enumerated. The size coverage of phase 2 of the industrial census is all in-scope establishments engaging 10 persons or more and a sample of those engaging less than 10 persons. The geographical coverage is all of Ghana.

CURRENT

Of the present time. Current repair and maintenance on buildings are those required to keep fixed assets in good order and working condition.

DATA PROCESSING

The census stage that follows data collection. It comprises the following activities: programme writing and testing, editing and coding, data entry, verification, validation and tabulation.

DEBRIEFING

A meeting at the end of a census operation at which all participants give their views on the census operation and make recommendations for improvement in the future.

DELIVERED COST

Same as purchasers' prices; that is the delivered cost at the establishment including the purchase price, charges for transport, the cost of insurance, the value of packaging materials paid for, and taxes and duties on goods.

DEPRECIATION

The value of buildings, machinery or transport used up through wear and tear in a year. The formal definition is 'the value, at current replacement cost, of the reproducible fixed assets used up during the year as a result of normal wear and tear'.

EDITING

A process that questionnaires go through before they are forwarded for data entry. The questionnaires are reviewed for consistency and accuracy.

EMPLOYEE

A person working for, and being paid by an establishment.

ESTABLISHMENT

An establishment is a unit engaged in the production of goods or services of the same kind usually at one location. The typical establishment is a single firm engaging in a single kind of business under a single ownership at a single location.

ENUMERATION

To enumerate is to name one by one as in counting. Enumeration is the act of naming one by one and collecting information from establishments.

ENUMERATORS

An enumerator is a person who counts off one by one. In the industrial census he is the field worker who administers the questionnaire and carried out other field procedures.

FIELD SUMMARY

The totals of selected information compiled by the enumerator at the end of enumeration

FINANCIAL YEAR

The firm's accounting period. The firm's financial accounts relate to a financial year which may not be the calendar year. A common financial year is the 1 April to 31 March of the following year.

FINISHED GOODS

All goods made by the establishment which are ready for sale.

GROSS

Gross means without deduction. Thus gross remuneration is the total payment before deductions.

INDUSTRIAL CAPACITY UTILISATION

Refers to the proportion of an establishment's plant and machinery being used in production. Full production capacity refers to the quantity that can be produced with existing plant and machinery if there are no interruptions in production due to shortage of raw materials, power cuts, machine failure, strikes, etc.

INDUSTRIAL ACTIVITY

The particular activity or activities undertaken by the establishment. Examples of industrial activity are:
Processing meat products
Manufacture of agricultural machinery and equipment.

IN-KIND (Payment in-kind)

Goods or services provided for the employees free of charge or at markedly reduced cost.

LEARNERS

Persons undergoing on-the-job training without pay. These include unpaid apprentices.

MATERIALS OF FOREIGN ORIGIN

Materials imported into Ghana. Foreign origin refers to where the materials were produced. The materials may be sold in Ghana; if produced abroad they are still to be entered as of foreign origin.

MATERIALS OF DOMESTIC ORIGIN

Materials produced in Ghana.

OWN ACCOUNT

For one's self. Work done on own account is work done by the establishments own labour force on the establishments fixed assets using its own materials.

OPERATIVES

Persons directly engaged in the operation of industrial machinery or in carrying out an industrial process. Also referred to as direct production workers.

PURCHASERS' PRICES (Delivered Cost)

Purchasers' prices are the delivered value at the establishment including the purchase price, charges for transport, the cost of insurances, the value of packaging materials paid for and taxes and duties on the goods.

QUESTIONNAIRE

The document on which data is collected. It contains questions and instructions for completion.

RAW MATERIALS

Materials which are to be processed or manufactured into another form.

RESPONDENT

A person who supplies information for the completion of the questionnaire. In an industrial census respondents are mainly accountants, proprietors and managers.

SCOPE

Range of view or enquiry. In the industrial census the scope is establishments engaged primarily in Mining and Quarrying Manufacturing and the Production and Distribution of Electricity Gas and Water. Establishments engaged in these industrial activities are in-scope.

SHOULDER NUMBER

A form identification number, generally in the upper left or upper right hand corner of the form. For the Industrial Census Shoulder numbers are prefixed with the initials NIC that is, National Industrial Census.

SECOND HAND FIXED ASSETS

Assets, buildings, machinery and transport previously used in Ghana.

STOCK

Reserves of raw material or goods. A manufacturer stock piles raw materials between purchases and uses them in the manufacturing process.

TABLES

Arrangement of data in columns and rows. The survey statistician sets out the results of the census in tables. The final product of data of data processing is the printing out of tabulated data. Tables are the basis of further analysis.

UNPAID FAMILY WORKERS

Persons living in the household of an owner and working in the establishment without regular pay for at least one third of the normal working period.

WORK IN PROGRESS

Materials which have been partially processed by the establishment, but which are not usually sold without further processing.

APPENDIX 1
GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION									
			AUGUST									
			3RD	4TH	5TH							
		M										
		A										
		M										
		A										
		M										
		A										
		M										
		A										
		M										
		A										
		M										
		A										

SIGNATURE: M = MORNING APPOINTMENT A = AFTERNOON APPOINTMENT

Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION									
			AUGUST									
			17TH	18TH								
		M										
		A										
		M										
		A										
		M										
		A										
		M										
		A										
		M										
		A										

SIGNATURE: M = MORNING APPOINTMENT A = AFTERNOON APPOINTMENT

Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION											
			AUG	S E P T E M B E R										
			31ST	1ST	2ND	3RD	4TH	7TH	8TH	9TH	10TH	11TH		
		M												
		A												
		M												
		A												
		M												
		A												
		M												
		A												
		M												
		A												

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Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION												
			S E P T E M B E R												
			14TH	15TH	16TH	17TH	18TH	21ST	22ND	23RD	24TH	25TH			
		M													
		A													
		M													
		A													
		M													
		A													
		M													
		A													
		M													
		A													

SIGNATURE: M = MORNING APPOINTMENT A = AFTERNOON APPOINTMENT

Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION										
			SEPT	O C T O B E R									
				1ST	2ND	3RD	4TH	7TH	8TH	9TH	10TH	11TH	
		M											
		A											
		M											
		A											
		M											
		A											
		M											
		A											
		M											
		A											

SIGNATURE: M = MORNING APPOINTMENT A = AFTERNOON APPOINTMENT

Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

GHANA INDUSTRIAL CENSUS 2003
ENUMERATOR'S PLANNER

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL NUMBER	NAME OF ESTABLISHMENT	TIME	DAYS OF DISTRIBUTION, INTERVIEW OR COLLECTION										
			O C T O B E R										
			14TH	15TH									
		M											
		A											
		M											
		A											
		M											
		A											
		M											
		A											
		M											
		A											

SIGNATURE: M = MORNING APPOINTMENT A = AFTERNOON APPOINTMENT

Put 'D' in the column of the date of 1st visit.
Put 'I' in the column of the date scheduled for interview.
Put 'C' in the column of the date scheduled for collection of questionnaire.

APPENDIX 2

FORMAT FOR DAILY RECORDINGS IN NOTE BOOK

Date:

1. Name of Establishment:

2. Problem/Observation:

.....
.....
.....

3. How problem is resolved:

.....
.....
.....

4. Comments by Respondent (if any):

.....
.....
.....

5. Remarks:

.....
.....
.....

6. Transport and Travelling expenses

J O U R N E Y		C O S T
From	To	
Total		

APPENDIX 3
GHANA INDUSTRIAL CENSUS 2003
ENUMERATION CONTROL FORM

NAME OF ZONE: ZONE No. NAME OF ENUMERATOR:

CONTROL No. 1	NAME OF ESTABLISHMENT 2	PHYSICAL LOCATION 3	INDUSTRIAL ACTIVITY 4	TYPE OF QUESTIONNAIRE 5	DATE OF 1ST VISIT 6	DATE OF COMPLETION OF FORM		NAME OF RESPONDENT 8	REMARKS 9
						Collected 7a	Interviewed 7b		

NAME OF ENUMERATOR NAME OF SUPERVISOR

SIGNATURE OF ENUMERATOR SIGNATURE OF SUPERVISOR

DATE DATE

