

2021 POPULATION AND HOUSING CENSUS



2021 POST ENUMERATION SURVEY TRAINER'S GUIDE

CONTENTS

| | |
|--|----|
| CHAPTER 1 | 1 |
| INTRODUCTION TO THE TRAINER’S GUIDE | 1 |
| 1.1 BACKGROUND AND CONTEXT | 1 |
| 1.2 GENERAL INFORMATION | 1 |
| 1.3 RELEVANCE OF THE TRAINER’S GUIDE | 1 |
| 1.4 HOW TO USE THE TRAINER’S GUIDE | 2 |
| 1.5 HOW TO USE THE TRAINER’S GUIDE | 2 |
| 1.5.1 How to use the Trainer’s Guide for Training | 3 |
| 1.5.2 How to use the Trainer’s Guide for Monitoring | 4 |
| CHAPTER 2 | 6 |
| PRESENTATION ONE: INTRODUCTION TO 2021 PHC | 6 |
| 2.1 INTRODUCTION | 6 |
| 2.2 PURPOSE | 6 |
| 2.3 LEARNING OUTCOMES | 6 |
| 2.4 TEACHING AND LEARNING MATERIALS | 6 |
| 2.5 CONTENT | 7 |
| 2.5.1 Concepts of Population Census and Housing Census | 7 |
| 2.5.2 History of Censuses in Ghana | 7 |
| 2.5.3 Essential Features of 2021 PHC | 7 |
| 2.5.4 Rationale for the 2021 PHC | 7 |
| 2.5.5 Census Process | 8 |
| 2.5.7 Importance of 2021 PHC | 9 |
| 2.5.8 Legal Framework | 9 |
| 2.5.9 Confidentiality and Oath Taking | 9 |
| 2.6 REVISION | 10 |

| | |
|--|----|
| CHAPTER 3 | 11 |
| PRESENTATION TWO: CENSUS ERRORS, AND OVERVIEW OF CENSUS EVALUATION METHODS | 11 |
| 3.1 INTRODUCTION | 11 |
| 3.2 PURPOSE..... | 11 |
| 3.3 LEARNING OUTCOMES | 11 |
| 3.4 TEACHING AND LEARNING MATERIALS | 11 |
| 3.5 CONTENT | 12 |
| 3.5.1 Objectives of PES | 12 |
| 3.5.3 Persons Eligible for PES..... | 12 |
| 3.5.4 Processes of PES..... | 12 |
| 3.5.5. Questionnaire | 13 |
| CHAPTER 4 | 14 |
| PRESENTATION THREE: OVERVIEW OF PES | 14 |
| 4.1 INTRODUCTION | 14 |
| 4.2 PURPOSE..... | 14 |
| 4.3 LEARNING OUTCOMES | 14 |
| 4.4 TEACHING AND LEARNING MATERIALS | 14 |
| 4.5 CONTENT | 15 |
| 4.5.2 Coverage error | 15 |
| 4.5.3 Content error | 15 |
| 4.5.4. Types of coverage errors..... | 15 |
| 4.5.5 Sources of census errors..... | 15 |
| 4.5.6 Methods of Census Evaluation | 15 |
| CHAPTER 5 | 16 |
| PRESENTATION FOUR: ACHIEVING COMPLETE COVERAGE..... | 16 |
| 5.1 INTRODUCTION..... | 16 |

| | | |
|---|---|----|
| 5.2 | PURPOSE | 16 |
| 5.4 | TEACHING AND LEARNING MATERIALS | 16 |
| 5.5 | Key indicators | 16 |
| 5.6 | CONTENT | 17 |
| 5.6.1 | Concept and definitions | 17 |
| 5.6.2 | Complete coverage..... | 17 |
| 5.6.3 | How to Ensure Complete Coverage..... | 17 |
| 5.6 | REVISION..... | 17 |
| CHAPTER 6 | | 18 |
| PRESENTATION FIVE: BEHAVIOUR AND RESPONSIBILITIES OF FIELD OFFICERS . | | 18 |
| 6.1 | INTRODUCTION | 18 |
| 6.2 | PURPOSE..... | 18 |
| 6.3 | LEARNING OUTCOMES | 18 |
| 6.4 | TEACHING AND LEARNING MATERIALS | 18 |
| 6.5.1 | Enumerator’s Role | 19 |
| 6.5.2 | Supervisor’s Role..... | 19 |
| 6.5.3 | Conduct of Field Officers | 19 |
| 6.5.4 | Appearance of Field Officers..... | 19 |
| 6.5.6 | Interviewing skills..... | 20 |
| 6.5.7 | Language..... | 20 |
| 6.5.8 | Conducting an interview | 20 |
| 6.5.9 | Field Officers’ obligations | 20 |
| 6.5.10 | Things Field Officers MUST NOT DO | 21 |
| 6.7 | REVISION..... | 21 |
| CHAPTER 7 | | 22 |
| PRESENTATION SIX: COMMUNITY AND HOUSEHOLD ENTRY GUIDELINES | | 22 |

| | |
|--|----|
| 7.1 INTRODUCTION | 22 |
| 7.2 PURPOSE..... | 22 |
| 7.3 LEARNING OUTCOMES | 22 |
| 7.4 TEACHING AND LEARNING MATERIALS | 22 |
| 7.5 CONTENT | 22 |
| 7.5.1 Key Concepts and Definitions | 22 |
| CHAPTER 8 | 23 |
| PRESENTATION SEVEN: PRELIMINARY OPERATIONS BEFORE FIELDWORK..... | 23 |
| 8.1 INTRODUCTION | 23 |
| 8.2 PURPOSE..... | 23 |
| 8.3 LEARNING OUTCOMES | 23 |
| 8.4 WHY PRE-FIELDWORK ACTIVITIES IN PES..... | 23 |
| 8.5 REVISION | 23 |
| CHAPTER 9 | 24 |
| PRESENTATION EIGHT: WHAT TO DO AFTER ENUMERATION..... | 24 |
| 9.1 INTRODUCTION | 24 |
| 9.1 PURPOSE..... | 24 |
| 9.2 LEARNING OUTCOMES | 24 |
| 9.3 TEACHING AND LEARNING MATERIALS | 24 |
| 9.4 CONTENT..... | 24 |
| 9.4.1 Why Tablet Basics | 24 |
| 9.4.2 Overview of the Tablet and Accessories | 25 |
| 9.4.3 Features of a Tablet..... | 25 |
| 9.4.4 Key Functions of the Tablet..... | 25 |
| 9.4.5 Key Functions of the Tablet..... | 25 |
| 9.4.6 Rules Governing the use of Tablet for Fieldwork | 25 |

| | |
|--|----|
| 9.4.7 Handling Tablets and Accessories | 26 |
| 9.4.8 Check List Before Fieldwork..... | 26 |
| 9.4.9 Basic Troubleshooting | 26 |
| 9.4.10 Issuance and Receipt of IT Assets | 27 |
| 9.4.11 Issuance and Receipt of IT Assets | 27 |
| 9.4. REVISION..... | 28 |
| CHAPTER 10 | 29 |
| PRESENTATION NINE: USE OF MAPS..... | 29 |
| 10.1 INTRODUCTION | 29 |
| 10.2 PURPOSE..... | 29 |
| 10.3 LEARNING OUTCOMES | 29 |
| 10.4 TEACHING AND LEARNING MATERIALS | 29 |
| 10.5 WHY THE USE OF MAPS IN CENSUS | 30 |
| 10.6 KEY INDICATORS | 30 |
| 10.7 CONTENT..... | 30 |
| 10.7.1 Concepts and Definitions..... | 30 |
| 10.7.2 Description of EA Boundaries (PHC2)..... | 31 |
| 10.7.3 Map reading | 31 |
| 10.7.4 Census Geographical Terms | 32 |
| 10.7.5 Locating EAs and Localities | 32 |
| 10.8 REVISION | 33 |
| PRESENTATION TEN: TABLETS BASICS AND CAPI USE..... | 35 |
| 11.1 INTRODUCTION | 35 |
| 11.2 PURPOSE..... | 35 |
| 11.3 LEARNING OUTCOMES | 35 |
| 11.4 TEACHING AND LEARNING MATERIALS | 35 |

| | |
|--|----|
| 11.5 CONTENT | 35 |
| 11.5.1 Overview of Tablets and Accessories | 35 |
| 11.5.3 Rules Governing the Use of Tablets for Field Work | 36 |
| 11.5.4 Tablets and Accessories, Care and Use | 36 |
| 11.5.5 Basic Troubleshooting Techniques | 36 |
| 11.5.6 What is CAPI? | 36 |
| 11.5.7 Data flow in 2021 PES CAPI Application Operations | 37 |
| 10.6 REVISION | 37 |
| CHAPTER 12 | 38 |
| PRESENTATION ELEVEN: LISTING OF STRUCTURES | 38 |
| 12.1 INTRODUCTION | 38 |
| 12.2 PURPOSE | 38 |
| 12.3 LEARNING OUTCOMES | 38 |
| 12.4 TEACHING AND LEARNING MATERIALS | 38 |
| 12.5 CONTENT | 39 |
| 12.5.1 Why Listing in PES | 39 |
| 12.6 CONTENT | 39 |
| 12.6.1 Concepts and Definitions | 39 |
| 12.6.2 Level of completion | 39 |
| 12.6.3 Procedures for Listing of Structures | 40 |
| 12.6.4 Listing in Type 3 EAs | 40 |
| 12.7 REVISION | 41 |
| CHAPTER 13 | 42 |
| PRESENTATION TWELVE: COMPLETING THE LISTING FORM | 42 |
| 13.1 INTRODUCTION | 42 |
| 13.2 PURPOSE | 42 |

| | |
|--|----|
| 13.3 LEARNING OUTCOMES | 42 |
| 13.4 TEACHING AND LEARNING MATERIALS | 42 |
| 13.5 CONTENT..... | 42 |
| 13.5.1 .Concept of Structure and Level of Completion | 43 |
| 13.5.2 Concept of Housing Unit | 43 |
| 13.5.3 Concept of Dwelling Unit..... | 43 |
| 13.5.4 Concept of Household..... | 44 |
| 13.5.5 Completing the Listing Form L01-L17..... | 44 |
| 13.6 REVISION..... | 44 |
| CHAPTER 14 | 45 |
| PRESENTATION THIRTEEN: HOW TO COMPLETE THE PES QUESTIONNAIRE | 45 |
| 14.1 INTRODUCTION | 45 |
| 14.2 PURPOSE..... | 45 |
| 14.3 LEARNING OUTCOMES..... | 45 |
| 14.4 TEACHING AND LEARNING MATERIALS..... | 45 |
| 14.5 CONTENT..... | 45 |
| 14.5.1 Rationale for collecting socio-demographic data | 45 |
| 14.5.2 Names of usual household members..... | 46 |
| 14.5.3 Date of birth (Read C08)..... | 46 |
| 14.5.4 Age (Read C07) | 46 |
| 14.5.5 Religion (Read C09) | 46 |
| 14.5.6 Marital status (Read C10)..... | 47 |
| 14.5.7 Highest level of Education (Read C11) | 47 |
| 14.6 REVISION..... | 47 |
| CHAPTER 15 | 48 |
| PRESENTATION FOURTEEN: DATA QUALITY MONITORING | 48 |

| | |
|--|----|
| 15.1 INTRODUCTION | 48 |
| 15.2 PURPOSE..... | 48 |
| 15.3 LEARNING OUTCOMES | 48 |
| 15.4 TEACHING AND LEARNING MATERIALS | 48 |
| 15.5 WHY DATA QUALITY MONITORING IN PES | 49 |
| 15.6 CONTENT | 49 |
| 15.6.1 Concepts and Definitions..... | 49 |
| 15.6.2 Enumerators’ Duty in Data Quality Monitoring | 49 |
| 15.6.3 Supervisors’ Duty in Data Quality Monitoring | 49 |
| 15.6.4 Error messages and Clearance in PES of field officers | 49 |
| 15.7 REVISION | 50 |
| CHAPTER 16 | 51 |
| PRESENTATION FIFTEEN: DATA QUALITY MONITORING AND CLEARANCE | 51 |
| 16.1 INTRODUCTION | 51 |
| 16.2 PURPOSE..... | 51 |
| 16.3 LEARNING OUTCOMES | 51 |
| 16.4 TEACHING MATERIALS | 51 |
| 16.5 CONTENT..... | 51 |
| 16.5.1 Scope of Data Quality Monitoring and Clearance..... | 51 |
| 16.5.2 Zonal Data Quality Management Team (ZDQMT)..... | 52 |
| 16.5.3 Syncing of data | 52 |
| 16.5.4 Correction of Errors | 52 |
| 16.5.5 Clearance..... | 52 |
| CHAPTER 17 | 53 |
| PRESENTATION SIXTEEN: LEADERSHIP OF THE FIELD SUPERVISOR..... | 53 |
| 17.1 INTRODUCTION | 53 |

| | | |
|--------|--|----|
| 17.2 | PURPOSE..... | 53 |
| 17.3 | LEARNING OUTCOMES..... | 53 |
| 17.4 | TEACHING AND LEARNING MATERIALS | 53 |
| 17.5 | CONTENT..... | 53 |
| 17.5.1 | Duties of the Supervisor Before enumeration..... | 53 |
| 17.5.2 | Duties of the Supervisor DURING enumeration..... | 54 |
| 17.5.3 | Duties of the Supervisor AFTER enumeration..... | 54 |
| 17.6 | REVISION..... | 55 |

CHAPTER 1

INTRODUCTION TO THE TRAINER'S GUIDE

1.1 BACKGROUND AND CONTEXT

The 2021 PES comprises series of activities that have to be undertaken to ensure that the exercise is successfully conducted and quality data is acquired. One of such activities is the training of Field Officers. Three main documents, namely, the Field Officer's Manual, PowerPoint Presentation Slides and Trainer's Guide have been developed to train the Field Officers. The primary purpose of the Trainer's Guide is to provide instructions to trainers about how to use the Field Officer's Manual, PowerPoint Presentation Slides, and other instruments and materials to train.

1.2 GENERAL INFORMATION

Commonly, Trainer's Guides serve as introduction materials that provide guidance to facilitators or trainers on how teaching or training should be organised, and guidelines before, during and after the instructional period. This Trainer's Guide which will be used for the 2021 PES, is underpinned by a three-pronged rationale. These are:

1. To ensure consistency in the presentation of content;
2. To standardise information on skills, processes and performance specific tasks;
3. To guarantee uniformity in knowledge acquired, skills developed, task performed and objective(s) achieved.

Thus, three main ideas typically drive the rationale and focus of the Trainer's Guide. These are standardised structure, consistent logical frame and specific task performance. The standardised structure is the bedrock upon which the other two ideas spring up. The structure comprises, generally, the introduction, purpose, learning outcomes, teaching and learning materials, why [topic] in census, key indicators, content, and revision.

1.3 RELEVANCE OF THE TRAINER'S GUIDE

The Trainer's Guide was developed with the following relevance embedded in it.

- It explains the essence of each presentation module.
- It reconciles with the content of the Field Officer's Manual and the PowerPoint Presentation Slides, and directs the trainer to specific chapters, and sections for references.
- It provides a framework to the trainer. That is, it guides the trainer to facilitate effectively.
- It clarifies concepts, content and standards to apply in the 2021 PHC.
- It provides information on specific skills to develop/improve, processes to follow and how to perform specific tasks.
- It directs how learning outcomes could be achieved.
- Its user-friendly character makes it easy for non-technical persons to use.

1.4 HOW TO USE THE TRAINER'S GUIDE

In general terms, the Trainer's Guide is user-friendly. That is, one does not need any technical expertise to use it to train, facilitate or lead an instructional process or workshop. This CHAPTER ONE

1.5 HOW TO USE THE TRAINER'S GUIDE

In general terms, the Trainer's Guide is user-friendly. That is, one does not need any technical expertise to use it to train, facilitate or lead an instructional process or workshop. This notwithstanding, its effective use depends on principles that relate to the user, audience, setting, presentation team, presentation and mode of presentation (face-to-face and virtual).

The facilitators of the face-to-face training will use the Trainer's Guide. Each of these trainer-cohort should undertake three key activities.

- Self-assess: The User should do a self-assessment to be willing and capable to train. By extension, the person should be prepared to study the Field Officer's Manual, PowerPoint Presentation Slides, as well as all other related materials for training purposes.
- De-school: It is common for trainers to possess certain knowledge and information based on previous training and experiences. The User of this Trainer's Guide should do away with these prevailing knowledge because they could not be consistent with, but conflict that of the 2021 PES.
- Re-school: The User should be prepared to adopt only the information and knowledge of the 2021 PES, and its processes for training. This becomes possible after the de-school process.

The Audience: The focus of the training is the audience, also referred to as the trainees. The trainer needs to also place primary attention on the trainees. This is the reason the Trainer's Guide is developed as an interactive interface between the trainer and the trainees. As such, it connects to all the domains of learning - the cognitive (content), affective (interactive approach) and psychomotor (practical skill development). Thus, the Trainer's Guide connects the audience to the content (Field Officer's Manual), why the content, and how the content should be presented to the trainees.

Setting: The use of the Trainer's Guide will be effective in an appropriate setting. The trainer needs to ensure a set-up that would facilitate, for example, skill transfer and task performances that are role-play based and practically demonstrative. The need to set-up and ensure the adherence to all the COVID-19 protocols are also critical.

Presentation Team: Organising workshop training, making presentation and facilitating the process is a team work. Most often, a four-member team is composed for presentation purposes – two subject matter experts, one CAPI/ IT officers and one GIS officers (herein referred to as the facilitators). The team is responsible for ensuring that there is a successful presentation. Each of

these members should be conversant with all the materials for the training workshop, and particularly, how to use the Trainer's Guide effectively.

Presentation: The Trainer's Guide provides a step-by-step approach. The trainer, therefore, has to follow the steps outlined for each specific presentation. There are general and specific guidelines that every user or trainer should follow in using this Trainer's Guide. These are discussed in the subsequent section. Mode of Presentation:

Mode of Presentation: Two main modes of presentation that are available now are the face-to-face and virtual modes. Whichever mode is available, appropriate and selected, the approach to the use of the Trainer's Guide does not change.

1.5.1 How to use the Trainer's Guide for Training

To effectively use the Trainer's Guide, the trainer with the team should observe the following general and specific guidelines.

General: The trainer (or team) should:

- Understand the purpose of the 2021 PHC, its broader context, and the overarching objective – to generate quality data.
- Accept and internalise the rationale and focus of the Trainer's Guide.
- Study the main reference documents (Field Officer's Manual and Presentation Slides) and other related materials (Questionnaires, Listing Form, etc).

Specific: This entails guidelines before, during and after presentation.

Before presentation, the trainer (with the team) should:

- Practice, at least, twice, prior to training. This is to test and be sure that the logistics and equipment are functional, and most importantly, the presentation is done according to the dictates of the Trainer's Guide. It also helps the team to point out the flaws and gaps in the presentation to be addressed before that sure that all check that the necessary set-ups have been done
- Be conversant with the structure and specific steps/processes that have been outlined to guide the facilitation and interaction during training.
- Jot down the specific steps/processes that will be followed during the interaction. Alternatively, since the Trainer's Guide will be on the Tablet, the trainer could use the Tablet, unless the trainer sees it relevant to, in addition, jot down the steps.
- Allocate functions and responsibilities to team members.
- Identify and assemble all logistics and equipment such as the teaching learning materials that will be needed for the presentation.

During the presentation, the trainer should:

- Ensure that trainer(s) observe face-mask and social distancing protocols during face-toface interactions.

- Let all participants (trainers, trainees and support staff) recite the national pledge. The purpose is to self-affirm the national commitment, task and responsibility the Government of Ghana, through the Ghana Statistical Service, has reposed in all Census Officers.
- Follow the structure and specific steps/processes that have been outlined in the Trainer's Guide. This will enhance interactive presentation and reflective learning.
- Focus on the trainees because the Trainer's Guide is trainee-centred.

After the training, the trainer with the team should:

- Evaluate how the team used the Trainer's Guide. The evaluation should be at two levels: at the presenter level and at the group level.
- Develop best approaches (refer to guidelines before presentation) to use the Trainer's Guide in the next presentation.

1.5.2 How to use the Trainer's Guide for Monitoring

One of the components of the training of Census Officials for the 2021 PHC is monitoring. The overarching objective of the monitoring is to ensure the compliance of established guidelines and protocols before, during and after training. To monitor the training of trainees at the various training centres, the monitoring team should focus on the guidelines at each of these three levels – before, during and after presentations.

Before each presentation: At least, two days to the presentation, the monitoring team should interact with the presentation team to assess the extent of preparation. The monitoring team could use this opportunity to provide guidance and assistance to the training if needed. The purpose is to improve upon the preparatory activities towards the training. The following are the guidelines the monitoring team should follow:

- Request for the training plans (including the back-up plans) of the training team.
- Assess these plans and make suggestions, where necessary, and discuss with the training team. Note that the monitoring team should not impose any suggestions on the training team.
- Interact with the research team to assess the:
- Readiness and preparedness of the main user (the presenter) who will be using the Trainer's Guide for presentation;
- Availability and suitability of the setting for the training in general, and the presentation in particular; and
- COVID-19 protocols that have been put in place (i.e. if it is a face-to-face training)

During each presentation: The monitoring team is expected to observe how the training team comply with the training plans, and specifically, the methods of presentation that have been outlined in the Trainer's Guide. The purpose is not to find fault, but to monitor and make specific suggestions and comments that could be used to improve subsequent presentations. The focus should therefore be on:

- The specific roles and responsibilities of each member of the training team; i.e. the delivery of the presentation, the role of the moderator and the responsibility of the stand-by member.
- How interactive the training session has been;

- The participation of the trainees;
- The internal and external factors that enhanced/affected the session.

After the presentation: The monitoring team should conduct a post-presentation interaction to discuss the observations, suggestions and other comments with the training team. The expectation is for the training team to accept and incorporate these suggestions into future presentation and training sessions. The monitoring team should be friendly, and use constructive (but not judgemental) language expressions during the interaction. Finally, the monitoring team should write a report on each presentation session observed.

CHAPTER 2

PRESENTATION ONE: INTRODUCTION TO 2021 PHC

2.1 INTRODUCTION

Population censuses have been conducted in Ghana at approximately ten-year intervals since 1891. The last of such censuses, the fifth to be undertaken during the post-independence period, was conducted in 2010. It recorded a total population of approximately 24.7 million. The Ghana Statistical Service (GSS) has scheduled the conduct of the 2021 Population and Housing Census (PHC) in June, 2021. This presentation introduces Field Officers (Enumerators and Supervisors) to the concept of Population and Housing Census.

2.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge and skills to appreciate the importance of the 2021 PHC, understand the entire Census process and be able to explain its rationale.

2.3 LEARNING OUTCOMES

By the end of this presentation the participants should be able to:

1. Distinguish between Population Census and Housing Census;
2. Explain the significance of the Census Night;
3. Identify the essential features of the 2021 PHC;
4. Explain the 2021 PHC process;
5. Explain the rationale of the 2021 PHC;
6. Identify and explain the key elements in the legal framework; and
7. Discuss the importance of confidentiality in the conduct of the Census.

2.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation:

1. Projector
2. Flip chart
3. Presentation slides
4. Field Officer's Manual

2.5 CONTENT

2.5.1 Concepts of Population Census and Housing Census

Examine the previous knowledge of trainees on population census, housing census, and the relationship between the two.

Let trainees quickly read Chapter 1 (Sections 1.1, 1.2 and 1.3) of the Field Officer's Manual.

2.5.2 History of Censuses in Ghana

Ask the trainees to recount the years Ghana conducted population censuses, and population and housing censuses (Section 1.4).

After a brief discussion, present the pre- and post-independence censuses and **emphasize that PHC commenced in Ghana in the year 2000.**

2.5.3 Essential Features of 2021 PHC

Task the trainees to read Chapter 1 (Section 1.5) of the Field Officer's Manual, and identify the essential features of 2021 PHC. Sample questions to ask are:

- What do you consider to be the essential features of a PHC?
- In your view what constitutes the key features of 2021 PHC?

Let the trainees explain their responses and **proceed** to discuss the essential features of the 2021 PHC. Again, discuss with the trainees persons to be enumerated and persons not to be enumerated. Persons to be enumerated are as follows:

1. All persons who spent the Census Night in a household in Ghana;
2. All persons who spent the Census Night in an institution (Group Quarters) in Ghana;
Example: Those in hospitals, colleges, hotels, barracks and prisons.
3. All outdoor sleepers and those in transit in Ghana (floating population) on the Census Night.

Persons **not** to be enumerated are as follows:

1. All usual members and other persons who did not spend the Census Night in Ghana;
2. Persons born **after** the Census Night; and
3. Persons who died **before** the Census Night.

2.5.4 Rationale for the 2021 PHC

From the history of censuses in Ghana, it was observed that the country has organized two main censuses: population census and population and housing census. *Ask the trainees to explain why Ghana moved from population census to population and housing census?*

Allow the trainees to express their views. Proceed to discuss the rationale for the 2021 PHC with them. Also discuss the *uniqueness of the 2021 PHC* with trainees (Section 1.6).

2.5.5 Census Process

This section is meant to give an overview of what a census process involves. Ask trainees to state what they know about the census process. Examples of questions to ask are:

- What do you know about the census process?
- What constitutes the census process?
- What are the activities involved in a census?

Allow the trainees to share their views on the question(s). Ask them to refer to Section 1.7 of the Field Officer's Manual.

Display the Census Process Framework (Figure 1.1) and ask the trainees to identify the various activities under each of the following stages for discussion.

- a. Preparatory Phase: Enumeration Phase
- b. Post-enumeration Phase
- c. Post-enumeration survey: Production, Publication and Dissemination

Activities Undertaken by GSS Discuss with trainees the preparatory work done by GSS in relation to the 2021 PHC. See guidance notes below:

- Preparations toward the 2021 PHC started about four years ago. The geographical field work which involves the demarcation of Ghana into about 52,000 enumeration areas (EAs) began in 2018.
- Preparations of census documents and other activities started in January, 2017.
- A trial census to test maps, documents and procedures was conducted in May, 2019.

Additional work yet to be done include:

- Listing of houses/structures (i.e. assigning a 4-digit serial number preceded by PHC to each house/structure) would be carried out *two weeks* preceding Census Night (27th June, 2021)
- Enumeration of household population and collection of data on housing units are scheduled to start on **the morning of 28th June, 2021** and will last for about two weeks (14 days).
- There will be about 75,000 census Field Officers (11,000 Supervisors, and 64,000 enumerators). They would be trained on field procedures and concepts to enable them do their work well.
- Immediately after the enumeration, a Post Enumeration Survey (PES) that aims at independent evaluation check of coverage and content will be carried out. The checks will be on sample basis and will show how well the main field work was carried out.
- Plans for data processing have already been outlined. Table formats and outline of census reports are being prepared.

Let trainees scan-read the various instruments for the 2021PHC (Listing Form, PHC1A-1E).

2.5.6 What is New in the 2021 PHC

Let the trainees know that the following are new in the 2021 PHC (Section 1.8).

1. The use of **Computer Assisted Personal Interviewing (CAPI)** to ensure efficient data collection, management and processing for early release of results;
2. The use of **Geographic Positioning System (GPS) coordinates** to pick locations of structures and localities using the tablet;
3. Inclusion of additional questions to elicit more information on sanitation including **solid waste disposal, toilet facilities and wastewater disposal**;
4. Expansion of the ICT Section to ensure the measurement of **SDG indicators**.

2.5.7 Importance of 2021 PHC

Let trainees reflect on the importance of 2021 PHC for a minute, and ask them to point out and explain. Discuss the issues raised and emphasise the specific importance of 2021 PHC in national development (Section 1.9).

Emphasise that the Census is not for tax purposes.

2.5.8 Legal Framework

Read Chapter 2, Sections 2.1 2.3-2.6 and discuss the implications of the law with trainees.

- Legal authority of the census is Statistical Service Act, 2019 (Act 1003).
- Legal right to enter premises to conduct the census
- Public's obligation to respond to census enquiries

2.5.9 Confidentiality and Oath Taking

Ask them to read Chapter 2, Section 2.1 and proceed to discuss the issue of confidentiality and privacy aspects of the census.

Discuss with trainees the rationale for Oath Taking in a census exercise. Ask them to read Section 2.2 and stress the following:

- All census officers take an oath of secrecy;
- Confidentiality aspect of the census;
- The essence of Privacy in census taking
- All information is published in aggregated tables; and
- Careful handling of census documents.

Stress that it is a serious offence for a Census Officer to falsify information.

2.5.10 Basic Security, Safety and Health Guidelines

Let trainees discuss the basic security and safety guidelines that Field Officers should be aware of. Refer trainees to Chapter 4, Section 4.5 of the Field Officer's Manual and discuss the guidelines with them.

Ask the trainees to present what they know about COVID-19: Origin, mode of transmission, symptoms and preventive guidelines. Refer to Section 6.5 and discuss how Field Officers could prevent infection.

2.6 REVISION

Assess the knowledge and understanding of the issues discussed in this presentation. The following sample questions could be relevant.

1. Distinguish between Population Census and a Housing Census
2. Why is the Census Night relevant in the 2021 PHC?
3. What are the essential features of the 2021 PHC?
4. What constitutes the Census Process?
5. Why is PHC important?
6. Identify and explain the key elements in the legal framework that guide the conduct of the 2021 PHC.

IF THERE ARE GAPS BASED ON THE RESPONSES PROVIDED, YOU NEED TO REVISIT THE SPECIFIC DISCUSSION(S).

CHAPTER 3

PRESENTATION TWO: CENSUS ERRORS, AND OVERVIEW OF CENSUS EVALUATION METHODS

3.1 INTRODUCTION

Data collected from field inquiry is invariably subject to certain amount of errors that creep in due to errors committed by the interviewer or respondent. It is important to assess the census quality by the extent of errors. Credibility of the census data is crucial for building public trust and the level of confidence in using the census data. Census evaluation aims to explain errors in the census results. PES is a complete re-enumeration of a representative sample of a PHC, followed by matching of records of each household and persons in household enumerated in the PES with corresponding records from the Census.

3.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge and skills to appreciate the importance of the 2021 PES, understand the entire PES process and be able to explain its rationale.

3.3 LEARNING OUTCOMES

By the end of this presentation, trainees should be able to:

- Explain Census errors?
- Know the different types of Census errors
- Identify the sources of census errors
- Explain the various methods of census evaluation
- Explain what is Post Enumeration Survey

3.4 TEACHING AND LEARNING MATERIALS

1. Projector
2. Flipchart
3. Marker
4. Tablet
5. Presentation slides

3.5 CONTENT

3.5.1 Objectives of PES

Let trainees share their views about the objectives of PES, ask them to read Chapter 1 Section 1.6 of the field officers manual. Afterwards, discuss each objectives using simple language for trainees to understand.

3.5.2 Features of PES

Ask trainees to share their views about the features of a good or successful PES and discuss the following:

- Timing
- Operational independence from the census
- Quality assurance
- Control

Point out to the trainees that Operational independence from the census implies.

3.5.3 Persons Eligible for PES

Explain to trainees that PES deals with households occupying housing units

Stress that PES excludes the following populations;

1. Institutional population
2. Outdoor sleepers
3. Homeless households

3.5.4 Processes of PES

Take trainees to through the following:

- Pilot PES
- **Listing and enumeration** of households in EAs selected for the PES.
- **Matching** of corresponding responses from PES and census.
- **Field reconciliation** of mismatched responses from PES and census
- Analysis of data and estimation of indicators

3.5.5. Questionnaire

Examine previous knowledge of trainees on questionnaire. Refer to Chapter 9 (Listing) and Chapter 11 (Main Questionnaire) in Section 9.4, 11 respectively of the field officers manual and take them systematically through the following:

- PES listing form.
- Main questionnaire
- Reconciliation questionnaire

3.6 REVISION

1. Explain the meaning of PES;
2. Explain the significance of PES;
3. Identify the essential features of the 2021 PES;
4. Explain the 2021 PES process;
5. Explain the rationale of the 2021 PES;
6. Discuss the importance of public trust and confidence in using census data

CHAPTER 4

PRESENTATION THREE: OVERVIEW OF PES

4.1 INTRODUCTION

The quality of population and housing census data is very important for many reasons, building public trust and understanding in the national statistical system. The purpose of census evaluation is to provide users with a level of confidence when utilizing the data, and to explain errors in the census result.

It is therefore important to choose an appropriate way of sending out these messages to the right group of people. Numerous methods are available to estimate the coverage and content error of censuses.

4.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge and skills to appreciate the importance of the 2021 PES, understand the entire PES process and be able to explain its rationale.

4.3 LEARNING OUTCOMES

By the end of this presentation, trainees should be able to:

1. Explain the meaning of PES;
2. Explain the significance of PES;
3. Identify the essential features of the 2021 PES;
4. Explain the 2021 PES process;
5. Explain the rationale of the 2021 PES;
6. Discuss the importance of public trust and confidence in using census data.

4.4 TEACHING AND LEARNING MATERIALS

1. Projector
2. Flip chart
3. Presentation slides
4. Field Officer's Manual

4.5 CONTENT

4.5.1 Concepts and Definitions

Examine the previous knowledge of trainees on the meaning of PES, significance of PES, the essential features of the 2021 PES and the rationale of the 2021 PES.

4.5.2 Coverage error

This refers to either an under-count or over-count of units owing to omissions of persons/ housing units or duplication/erroneous inclusion, respectively.

4.5.3 Content error

Content error pertains to the error in the characteristics that are reported for the persons or housing units that are enumerated. Both types of error can affect the distribution of the population with respect to their characteristics.

4.5.4. Types of coverage errors

Let trainees share their views on the following and refer to Chapter 1 Section 1.3 of the field officers manual. Explain the errors further.

- a) Omissions
- b) Duplications
- c) Erroneous inclusions

4.5.5 Sources of census errors

Ask trainees to share their knowledge on census errors

- a) Enumerator errors
- b) Respondent errors

4.5.6 Methods of Census Evaluation

Let trainees mention the methods of census evaluations they know. Ask them to read Chapter 1 Section 1.4 of the field officers manual to identify various methods of census evaluations.

Afterwards, discuss with the trainees

- 1) Internal consistency checks
- 2) External validity checks
- 3) Demographic techniques
- 4) Post Enumeration Survey (PES)

Take time to explain the PES into detail

CHAPTER 5

PRESENTATION FOUR: ACHIEVING COMPLETE COVERAGE

5.1 INTRODUCTION

The aim of the 2021 PES is to obtain a complete count of structures, households and persons within the borders of Ghana.

This means that:

- All structures must be listed.
- All households and persons in the Enumeration Area (EA) must be enumerated.

5.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge and skills to be able to list all structures and enumerate all households and persons within the assigned area (complete coverage).

5.3 LEARNING OUTCOMES

By the end of this presentation, trainees should be able to:

1. Explain key strategies to achieve complete coverage;
2. Illustrate the ability to achieve complete coverage in the EAs allocated to them; and
3. Identify the gaps in achieving complete coverage.

5.4 TEACHING AND LEARNING MATERIALS

1. Flip chart
2. Marker
3. Laptop
4. Tablets
5. Presentation slides

5.5 Key indicators

Ask trainees to mention the indicators that can be derived from the data from the PES. Briefly discuss the following with them.

1. Characteristics of an EA (Prior to listing)
2. Number of structures listed
3. Number of population in households listed
4. Number of households enumerated per day
5. Total number of households enumerated

5.6 CONTENT

5.6.1 Concept and definitions

5.6.2 Complete coverage

Lead trainees to discuss complete coverage in PES, refer them to Chapter 12 Section 12.2.

Stress on the need to achieve complete coverage in the 2021 PES

5.6.3 How to Ensure Complete Coverage

Ask trainees to share their views on how to achieve complete coverage, refer to Chapter 12 Section 12.2 of the field officers manual and discuss with them.

Point out areas likely to miss out households.

5.6 REVISION

1. Why is it relevant for complete coverage to be achieved?
2. As one of the Field Officers of 2021 PES, what practical steps will you take to achieve complete coverage?
3. There are certain areas that are likely to be missed when identifying households.
 - a. Identify these places
 - b. Why could households at these places be missed?
4. Explain how a missed structure will be identified and added after listing.
5. When faced with a boundary dispute in the field, how will you address it?

CHAPTER 6

PRESENTATION FIVE: BEHAVIOUR AND RESPONSIBILITIES OF FIELD OFFICERS

6.1 INTRODUCTION

The information collected by Field Officers is the foundation upon which the success of the Post Enumeration Survey will be measured. Field officers will play important roles in the exercise. Field Officers must make every effort to obtain complete and accurate responses and record them carefully and correctly. Field Officers are therefore required to observe and adhere to the principles and practices in discharging their responsibilities in the field. They are also to be conversant with the “dos & don'ts” on the field. There is also the need to equip them with the requisite interviewing skills.

6.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge on the specific roles, conduct and responsibilities of Field Officers, and the requisite skills to discharge their mandate in the field.

6.3 LEARNING OUTCOMES

By the end of the presentation, trainees should be able to:

1. Describe the roles, behaviour and responsibilities that are expected of a Field Officer;
2. Identify appropriate modes of appearance including dress code;
3. Acquire skills to interact with people and households in the EA assigned; and
4. Develop the needed skills to deal with household members who refuse to be enumerated.

6.4 TEACHING AND LEARNING MATERIALS

1. Flip chart
2. Marker
3. Laptop
4. Tablets
5. Presentation slides

6.5 CONTENT

6.5.1 Enumerator's Role

Let the trainees share their views about the roles of Enumerators in PES. Let them read Section 6 of the Field Officers Manual. Ask them to outline the specific roles of the Enumerator in the 2021 PES. **Emphasise** the importance of each role mentioned to the 2021 PES.

Allow the trainees to ask questions with respect to the role of the Enumerator. Respond appropriately.

6.5.2 Supervisor's Role

Ask the trainees share their views about the roles of Enumerators in PES. Let them read Section 15.4.7 of the Field Officer's Manual. Task the trainees to outline the specific roles of Supervisor and **emphasise** the importance of each role mentioned to the 2021 PES.

Indicate to the trainees that the Supervisor is responsible for all PES activities in the team.

Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

6.5.3 Conduct of Field Officers

Let trainees point out the specific behaviours they are Field Officers are expected to put up during the fieldwork. Let them undertake a glance-read to identify the behaviours mentioned in Sections 4.2, 4.5 and 4.6. Afterwards, undertake the following:

1. Discuss how to approach people
 - Call out two or more Enumerators to demonstrate how to approach a house/household.
 - Allow trainees to comment on the demonstration.
3. Proceed to present the key points on how to approach a house/household. Refer trainees to Section 4.2. Present the example given in the Field Officer's Manual.
4. Let trainees describe situations they regard as difficult cases and explain the cause and reasons for the difficulty. Call out two trainees to demonstrate one of such difficult cases.
5. Allow trainees to comment on the demonstration and proceed to discuss the issues. Refer trainees to Chapter 4, Section 4.6. **Emphasise** how to address difficult cases with them, particularly, using local-based approaches.

6.5.4 Appearance of Field Officers

Discuss with the trainees the appearance of a Field Officer and its implications including safety and security (e.g. dressing and hairstyle). Use the pictures in the presentation to reinforce understanding.

6.5.6 Interviewing skills

Discuss with the trainees the basic skills needed to conduct interviews e.g. courtesy, friendliness, politeness.

6.5.7 Language

Note the following:

- Use of language for the interview (Section 3.3)
- Point out to trainees about verbal and non-verbal communication. Ask them to list examples of use of verbal communication considered appropriate or inappropriate.
 - Also ask them to list examples of use of non-verbal communication which may be considered appropriate or inappropriate.
 - Examples of inappropriate non-verbal communication include: using the left hand; using the head to nod in answering questions; and winking at respondents and frowny face.
- Let trainees explain why they consider these verbal and non-verbal communication they have listed appropriate or inappropriate.

Refer trainees to Section 4.3 of the Field Officer's Manual and proceed to discuss further with them the *appropriate use of language during interviews*. Engage them on specific issues which are not appropriate.

6.5.8 Conducting an interview

Stress on the need to do the following:

- a) Make a good first impression
- b) Have a positive approach
- c) Obtain respondent's consent
- d) Assure confidentiality of responses
- e) Give direct answers to questions from respondents
- f) Be neutral throughout the interview
- g) Never suggest answers to the respondent
- h) Do not change the wording or sequence of questions

6.5.9 Field Officers' obligations

Ask each trainee to explain, at least, one thing they think Field Officers should do to enhance the data collection exercise.

Emphasise the Field Officers' obligations as listed under Section 4.8. of Field Officer's Manual and listed in Slides 31 to 33 of the PowerPoint Presentation.

6.5.10 Things Field Officers MUST NOT DO

Ask each trainee to explain, at least, one thing they think Field Officers should **not do** during the enumeration process. Use the pictures in Slides 22 to 23 of the PowerPoint Presentation to reinforce understanding.

Emphasize the things the Field Officer should **not do** as listed under Section 3.9.

6.7 REVISION

Assess the knowledge and understanding of the issues discussed in this presentation. The following sample questions could be relevant.

1. What are the roles and responsibilities of the following Field Officers in the field:
 - a. Supervisors
 - b. Enumerators on the field?
2. How should the appearance of Field Officers be in the field?
3. How important is the dressing of a Field Officer to data collection during the 2021 PHC?
4. Describe how you will conduct an interview with a respondent?
5. Outline the steps you will follow in dealing with household members who refuse to be enumerated?
6. Organise a role play with the trainee to demonstrate how to deal with a situation e.g. handling a difficult respondent.

IF THERE ARE GAPS BASED ON THE RESPONSES PROVIDED, YOU MAY HAVE TO REVISIT THE SPECIFIC DISCUSSION(S)

CHAPTER 7

PRESENTATION SIX: COMMUNITY AND HOUSEHOLD ENTRY GUIDELINES

7.1 INTRODUCTION

Securing and sustaining the community/household members' interest is critical during the 2021 PES. The support and cooperation of communities and households will ensure the successful collection of complete and accurate data during the 2021 PES. In preparation for the 2021 PES, nationwide publicity and advocacy activities have to sensitise all stakeholders and the general public on the importance of the Census and PES, and the support and cooperation expected from them. In addition, it is equally important for Field Officers to engage with the communities and households in their assigned areas to secure that needed support, cooperation and participation.

7.2 PURPOSE

The purpose of this session is to equip trainees with the requisite techniques and skills to conduct community entry and household entry to solicit their support, cooperation and participation in the 2021 PES.

7.3 LEARNING OUTCOMES

At the end of this presentation, trainees should be able to:

1. Explain the concepts of community and household.
2. Differentiate between community entry and household entry.
3. Demonstrate how to conduct:
 - a. Community entry
 - b. Household entry

7.4 TEACHING AND LEARNING MATERIALS

1. Flip chart
2. Marker
3. Laptop
4. Tablets
5. Presentation slides

7.5 CONTENT

7.5.1 Key Concepts and Definitions

CHAPTER 8

PRESENTATION SEVEN: PRELIMINARY OPERATIONS BEFORE FIELDWORK

8.1 INTRODUCTION

Effective pre-field preparations is key to successful fieldwork, planning well ahead of fieldwork ensures a systematic and orderly field activities. Preliminary Operation means preparatory activities done for fieldwork.

8.2 PURPOSE

The purpose of this session is to equip field officers with in-depth knowledge of how to prepare very well ahead of field exercise.

8.3 LEARNING OUTCOMES

By the end of the presentation, trainees should be able to:

- Know what to do before fieldwork
- Plan itinerary for fieldwork

8.4 WHY PRE-FIELDWORK ACTIVITIES IN PES

Ask trainees to share their views on some pre-field work activities and discuss with them the following:

- Logistics
- Coordinating with local authorities
- Knowledge about the community
- Publicity
- Time management
- Planning of Itinerary

8.5 REVISION

CHAPTER 9

PRESENTATION EIGHT: WHAT TO DO AFTER ENUMERATION

9.1 INTRODUCTION

As an Enumerator or Supervisor, your work is not complete until everyone in the assigned area has been enumerated and every field logistics have been accounted for. GSS has conducted Surveys using tablet. 2021 will be conducted with tablet. 2021 application is being run on android platform.

9.1 PURPOSE

The purpose of this presentation is to equip field officers with good working knowledge of tablet handling procedures, operation and GSS acceptable use policy for Tablet and other IT assets.

9.2 LEARNING OUTCOMES

By the end of this presentation, trainees should be able to:

1. Explain the responsibilities associated with the use of the 2021 PES tablets and related accessories.
2. Demonstrate the ability to use ALL functions of the tablet and related accessories applicable to 2021 PES field data collection.
3. Carry out basic tablet troubleshooting.

9.3 TEACHING AND LEARNING MATERIALS

1. Flip chart
2. Marker
3. Laptop
4. Tablets
5. Presentation slides

9.4 CONTENT

9.4.1 Why Tablet Basics

1. Enumerators and Supervisors will use tablets for enumeration in the 2021 PES.
2. Therefore tablet basics is needed to prepare trainees to:
3. Identify the features of the tablet and use their functions for the 2021 PES.
4. Handle the tablets and related accessories appropriately before, during and after fieldwork.
5. Explain the rules governing the use of GSS assets.

6. Carry out basic tablet troubleshooting
7. Use the tablet for enumerations.

9.4.2 Overview of the Tablet and Accessories

What is a tablet?

- A tablet is a wireless portable personal computer with a touchscreen as a primary input/output interface.
- Tablets use android, windows or mac (iOS) operating systems. The 2021 PES tablets use android operating system.
- The tablet is typically smaller than a notebook computer, but larger than a smartphone
Field Officers Manual Chapter 9.2.1

9.4.3 Features of a Tablet

9.4.4 Key Functions of the Tablet

Key functions of the tablet which will be used during the 2021 PES field data collection are:

- *WiFi*
- *Bluetooth*
- *Location (GPS)*
- *Mobile Data (Hotspot)*
- *Date and Time*
- *Battery & Charging*

9.4.5 Key Functions of the Tablet

1. **WiFi:** Allows the tablet to connect to an external internet source. E.g. Hotspot tethering.
2. **Bluetooth:** Wireless function that connects one tablet to another within a short range (10 m).
3. **Location:** Allows the tablet to read the GPS coordinates (Longitude, Latitude and Altitude) of structures. It also allows tracking of the tablet's location.
4. **Mobile Data:** Internal internet content delivered to the tablet over a SIM Card inserted into the tablet.

9.4.6 Rules Governing the use of Tablet for Fieldwork

1. The Tablet and its accessories are properties of GSS, and you are responsible for taking care of them.
2. The purpose of the tablet is for 2021 PES field data collection. Using the tablet for any other purpose is **strictly prohibited**.

3. Each tablet has been prepared for one enumerator **only**, and should be used by that enumerator alone. Sharing the tablet with unauthorized persons is **strictly prohibited**.
4. **Never** create a password to lock the tablet screen.
5. Do not attempt to **upgrade, update, or download/install** any application on the tablet.

Field Officers Manual Chapter 9.4

9.4.7 Handling Tablets and Accessories

1. Do not expose the tablet to any liquid substance; e.g. water, cooking oil, petrol, kerosene, etc.
 - a. *If any liquid enters the tablet, stop using it immediately, turn it off, remove all cables connected to it and contact the supervisor and the DIT .*
2. Do not:
 - a. place the tablet on the floor to avoid stepping on it.
 - b. place the tablet on a bed to avoid lying on it.
 - c. place the tablet on a chair to avoid sitting on it.
 - d. expose the tablet to dust or dirt which may damage it.
 - e. place heavy objects on the tablet to avoid breaking the screen.
 - f. expose the tablet to excessive heat (above).
 - g. throw or slide the tablet when putting it down.

9.4.8 Check List Before Fieldwork

1. Battery is fully charged
2. The tablet can be powered on
3. There is a functional charger that can charge the tablet.
4. Date and time are correct
5. CSEntry & 2021 PES CAPI Applications are installed and running

9.4.9 Basic Troubleshooting

Possible Problem 1:

Tablet's screen turns blank.

What to do:

- The tablet may be in “Sleep Mode”; Press on the *Power Button* to wake it up.
- Press on the power button for about 5 seconds to on the tablet to find out if the battery has not run out. Charge the battery and turn on the tablet again.
- Increase the brightness of the tablet if the screen is dimmed.

If problem persists, consult the supervisor and DIT.

Problem 2:

Tablet *not turning on (or not booting)* after pressing power button (once or many times)

What to do:

- The battery may not be charged. Plug the adapter to a power outlet and charge it for about **10 mins.**
- Turn on the tablet again.
- If tablet still doesn't start, charge for a few minutes more and try again.

If problem persists, consult the supervisor and DIT.

9.4.10 Issuance and Receipt of IT Assets

1. In order to account for all IT Assets allocated, field officers will complete an Issuance Form when they take delivery of assets and a Receipt Form when they return them.
2. These forms (Issuance and Receipt) will be issued for signing, and a soft copy will be sent to HQ.

9.4.11 Issuance and Receipt of IT Assets

Issuing Tablets:

- Head Office IT (HQIT) Unit will issue the tablets to Regional Office. Regional Office, led by the Regional IT Officer (RIT) will physically cross-check items received with records provided by HQIT and certify.
- ZIT will also issue the tablets to the teams. The ZIT will also cross-check the item received with the records provided by the HQIT and certify.

- The ZIT will issue the tablets to the supervisors and enumerators using the Tablet Issuance Form. The supervisor and enumerators in the teams will complete the form and return it to the ZIT before CAPI training and main fieldwork starts.

Receiving Tablets:

- When fieldwork is finalized, each team will complete the Tablet Receipt Form and submit it together with the tablets to the ZIT.
- The ZIT will check that all accessories are returned with the tablets before the team is certified for final payment.
- The ZIT will return the tablets to the HQIT when fieldwork is completed. The Regional Office, led by the RIT, will again cross-check all the tablets received from the Districts with the records and certify.
- Regional Office will finally send the tablets to the HQIT. The HQIT will also cross-check the items with the records and certify.

9.4. REVISION

CHAPTER 10

PRESENTATION NINE: USE OF MAPS

10.1 INTRODUCTION

Preliminary preparations are key to ensuring that Enumerators are given all the vital information and logistics needed for effective enumeration. One of such preparations is how to use maps. The use of maps are essential for achieving complete and accurate enumeration. It is important for Field Officers to be conversant with the procedures for using maps to accurately and correctly identify Enumeration and Supervisory Areas. This section of the Trainer's Guide covers the use of maps to identify concepts: Locality, Supervisory Area (SA), Enumeration Area (EA), and how to identify boundaries of SAs and EAs.

10.2 PURPOSE

The purpose of this presentation is to develop the capacity of trainees to enable them to read maps, identify SAs, EAs and localities, and interpret maps.

10.3 LEARNING OUTCOMES

At the end of this presentation, the trainees should be able to:

1. Carry out EA map orientation and canvassing;
2. Distinguish between the three types of EAs;
3. Identify the features of an EA map;
4. Read EA map descriptions to identify the boundaries;
5. Explain the components of the EA Code;
6. Distinguish between SA and EA maps; and
7. Identify any gaps or overlaps on maps or EAs.

10.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation:

- Projector
- Laptop

- Field Officer’s Manual
- PowerPoint Presentation Slides
- Hard copies of EA, SA Maps
- PHC2 Form
- Tablets/CAPI

10.5 WHY THE USE OF MAPS IN CENSUS

Ask the trainees to describe a map. Then discuss with them that the PHC map is used to:

- Locate and identify the EA/SA assigned to Field Officers;
- Ensure that all structures and persons within the boundaries of the EA are identified and enumerated to avoid any omissions or overlaps;
- Guide Field Officers to correctly identify areas of Field Officers’ thereby avoiding multiple counting;
- Determine the number of Field Officers to be assigned to each district; and
- Determine the number and type of logistics to be distributed in each EA.

10.6 KEY INDICATORS

Explain to the trainees that a lot of work has been done in demarcating the SAs and EAs for the 2021 PHC which will also be used for the 2021 PES. The data from the PES will help to compute some indicators such as:

- Geometry indicators (surface area, perimeter, circularity, compactness); and
- Accessibility indicators (Road network/ density, percentage of tree cover, surface friction • Building density and distribution (count, area, distribution/cluster) of variable.

10.7 CONTENT

10.7.1 Concepts and Definitions

Let the trainees share their perceptions about the concept of locality. Ask them to read Chapter 5, Sections 5.5 and 5.6 of the Field Officer’s Manual. Discuss with them the concept of locality. Ask the trainees to identify the types of maps to be used for the 2021 PES. Distribute hard copies of the 2021 PHC EA maps to the trainees (possibly in groups of two or four). Discuss with the trainees the following:

- EA map: This map is given to the Enumerator to enable him or her to locate his or her EA during the Census exercise. Attached to the EA Map a description form (also called the PHC2 Form) which describes the boundaries of the EA; 2. SA map: This is a group of adjoining EAs put together as one map given to the supervisor to help him/her to the Census field work; and 3. District map: This is a map that covers the entire district as an administrative unit. Further, **stress** that to ensure effective 2021 PHC, the entire country has been demarcated into smaller manageable areas with clearly defined boundaries termed as EAs. Task the trainees to read Chapter 6, Sections 6.2 Ask them to study the types of EA maps for the 2021 PHC. Let the trainees show the difference between the types of EA maps. Then highlight the following to deepen their understanding of the types of EA maps:
 1. Type One: entire locality forming an EA (One locality, one EA).
 2. Type Two: a locality divided into two or more EAs (One locality, many EAs).
 3. Type Three: Two or more localities put together to form one EA (Two or more localities, one EA).

Allow the trainees to study the EA maps to identify the differences. Proceed to discuss with them the features on EA maps using the legends (see Sections 6.3.1 – 6.3.4). Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

10.7.2 Description of EA Boundaries (PHC2)

Ask the trainees to share their views on how to describe EA boundaries on a map. Refer them to Section 6.3. **Emphasise** to the trainees that the PHC2 is an integral part of the EA map which provides all the geographical information of the EA. Afterwards:

- Show and discuss the PHC2 with trainees.
- Guide trainees to be conversant with the Geographical Area Codes (geocodes) (refer trainees to Section 6.6).
- Give a completed PHC2 Form to each trainee and ask them to interpret the geocodes.
- Distribute blank PHC2 Forms to trainees and task each trainee to complete a sample PHC2 Form.

Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

10.7.3 Map reading

Seek the views of the trainees about how to read maps. Explain to them that in addition to features, knowledge of boundaries on maps is critical for map reading. Ask them to read Section 6.3.1. **Stress** that the EA boundaries are clearly defined by both natural (e.g. rivers, streams, etc.) and

man-made (roads, footpaths, drains, etc.) features. Indicate that these features can be found on the actual ground. Let the trainees take a look at the EA maps to identify these features and boundaries. Point out that map reading is done to ensure that there are no over-lapping EA boundaries or any areas left out between adjoining EAs. Then guide the trainees to do the following:

1. Interpret and relate the EA boundary description to actual ground features (Section 5.7.3).
2. Identify all the three types of EA maps (Sections 6.3.2 – 6.3.4).
3. Be conversant with how to canvass each type of EA map (PHC2)
4. Show how to report to their Supervisors when they identify overlaps, omissions or new geographical areas (localities). To ensure that trainees are able to read the EA maps:
 1. Provide different types of EA maps to them, and ask them to identify the essential geographical features; and
 2. Guide them to canvass different EA types during field practice.
 3. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

Emphasise to trainees the uses of the dynamic map. Take the trainees through a practical session on how to use the maps on their tablets. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

10.7.4 Census Geographical Terms

Task the trainees to be familiar with the following census geographical terminologies and their uses:

- Locality: Section 5.5.
- Enumeration Area (EA): Section 5.6.
- Supervisory Area (SA): Section 7.6. 16
- District Map: Section 7.7

10.7.5 Locating EAs and Localities

Explain to the trainees that one needs to develop specific skills to identify EAs and localities on maps. Take the trainees through the following steps to guide them to locate EAs and localities.

1. First, locate the EA name (EA base) for Type 2 EA, and for Type 3, look for the EA base locality.

2. Identify the starting point on the description form (PHC2 Form).
3. Be conversant with the conventional signs on the map as well as the “North” direction. The symbols enable you to recognise the geographical features shown on the map while the “North” direction shows the geographical bearings to guide you to orient the map correctly.
4. Trace (canvass) the EA boundaries using visible features (e.g. rivers, streams, streets and highlands) on the EA map (refer to Sections 6.3.1 – 6.3.3).
5. Identify the starting point for enumerations. Note and emphasise the following:
 - Overlaps and gaps must first be reported to the Field Supervisor who will then consult the Zonal Data Quality Management Team (ZDQMT) to assist in resolving them;
 - When any Enumerator comes across an omitted locality/localities (especially in Type 3 EAs) she/he must report to the Field Supervisor who will then report to the Zonal Field Supervisor, and who will in turn report to the ZDQMT to get the right Enumerator to cover that new locality/localities. This omitted locality/localities must be correctly indicated on the EA Map or added to the list of localities on the PHC2 Form of that EA.
 - All boundary disputes in EAs and districts must first be reported to the Supervisor who will also report to the Zonal Field Supervisor, and who will subsequently, report to the Headquarters to get it resolved.
 - If a locality is deserted or collapsed (especially for Types 1 and 3 EAs) confer with and confirm from the neighbouring localities if indeed that locality is truly deserted or collapsed. Go back to this deserted or collapsed locality, take your GPS reading and add a report about the possible reasons the locality is deserted or collapsed.
 - Enumerators must be conversant with the codes in order to avoid: multiple counting or leaving some areas uncovered. Refer the trainees to Section 5.12 for further reading and understanding. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

10.8 REVISION

Present a summary of the presentation. Afterwards, assess the knowledge and understanding of the trainees on the following revision questions.

1. Describe how to carry out the following:
 1. Map orientation
 2. Canvassing 2. List the three types of EAs and show the differences between them.
 3. Mention at least five features of an EA map.

4. Identify the steps in reading an EA map.
5. Describe the components of an EA code.
6. How can you identify overlaps or gaps in an EA? If there are gaps based on the responses provided, you need to revisit the specific discussion(s). Inform the trainees about the next topic for discussion.

CHAPTER 11

PRESENTATION TEN: TABLETS BASICS AND CAPI USE

11.1 INTRODUCTION

A tablet is a wireless portable personal computer with a touchscreen as a primary input/output interface. It is typically smaller than a notebook computer, but larger than a smartphone. Tablets use android, windows or mac (IOS) operating systems. The 2021 PES tablets use android operating system. Ghana Statistical Service has conducted surveys using tablets in the last two years. Therefore, the Service has experience in using tablets and which will be brought to bear on the 2021 PES. The approach has the advantages of minimising errors, ensuring real-time data transmission and monitoring thereby improving data quality over the Paper Assisted Personal Interviewing (PAPI) approach.

11.2 PURPOSE

The purpose of this presentation is to equip field officers with good working knowledge of and skills for handling tablet operations and GSS' policy on the use of Tablets and other IT assets.

11.3 LEARNING OUTCOMES

By the end of this presentation, trainees should be able to:

1. Demonstrate the ability to use ALL functions of the Tablet and related accessories applicable to 2021 PHC field data collection;
2. Explain the responsibilities associated with the use of the 2021 PHC Tablets and related accessories;
3. Carry out basic tablet troubleshooting;
4. Explain the reasons CAPI is essential in the 2021 PHC; and
5. Describe the data flow in the 2021 PHC CAPI Application operations.

11.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation:

- Projector
- Laptop
- Tablet
- PowerPoint Presentation Slides
- Field Officer's Manual

Trainers should ensure that their trainees have their tablets as they go through the session.

11.5 CONTENT

11.5.1 Overview of Tablets and Accessories

Use the presentation slides to show the trainees the tablets accessories.

13.5.2 Key Functions of the Tablet

Let the trainees recall what is new about the 2021 PHC. Remind them about the use of the Tablet in the PES. Ask the trainees to mention the functions of a tablet. Refer them to read Chapter 12, Section 8.3 of the Field Officer’s Manual. Proceed to discuss with them the following key functions of the Tablet (which will be used during the 2021 PES field data collection). These are:

1. Date and Time
2. Wi-Fi
3. Bluetooth
4. Location (GPS)
5. Mobile Data
6. Hotspot
7. Battery Recharging

Refer the trainees to Section 8.3, and discuss the importance of each function of the Tablet to the 2021 PES. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

11.5.3 Rules Governing the Use of Tablets for Field Work

Let the trainees express their views about the rules they think will govern the use the Tablet for the 2021 PES. Task them to read the part of Section 8.4 that covers rules governing the use of the Tablet. Discuss with them these rules and highlight their importance and implications on data collection during the PES.

11.5.4 Tablets and Accessories, Care and Use

Let trainees share their views on handling a tablet and its accessories. Ask them to read Section 8.4 Proceed to discuss with them how the Tablet with its accessories should be handled, and emphasise the implications of Tablet handling on data collection during the 2021 PES. **Stress** that the Tablet is the property of the Ghana Statistical Service, and for that matter, the Government of Ghana. Therefore, they must be handled with utmost care. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

11.5.5 Basic Troubleshooting Techniques

Seek the views of the trainees about how to do basic trouble shooting. Ask them to read Section 8.3.4. Take them through the basic troubleshooting techniques, and emphasise the relevance of each of the techniques discussed.

11.5.6 What is CAPI?

Ask the trainees to tell what they know about CAPI. Ask them to read Section 8.5 of the Field Officer’s Manual. Proceed to discuss with them the meaning and use of CAPI (Computer Assisted-Personal-Interviewing). Indicate that CAPI is a technology (an application software) used on mobile devices that use the internet or cellular networks for data collection. Inform the trainees that CAPI will be used for the 2021 PES. Ask them to share their views about the reasons CAPI will be used for the 2021 PES. Ask them to read Section 8.5.2. Explain to the trainees that the 2020 round of censuses all over the world now makes use of technology (CAPI) to collect data for the following reasons:

- To improve the quality of data;

- To reduce processing time;
- To take GPS data; and
- To ensure real time data quality monitoring. Task the trainees to read the part of Section 8.5.3, which relates to the benefits of using the CAPI in data collection. Then proceed to discuss with them these benefits, and highlight these benefits: quality, timeliness and cost. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

11.5.7 Data flow in 2021 PES CAPI Application Operations

Let the trainees read Section 8.6 of the Manual. Proceed to explain to them that data collected from the field will be transmitted during the 2021 PES enumeration in three ways. These are:

- The first level is between the Enumerator and Supervisor, where the data is transmitted (synced) via Bluetooth connectivity to the Supervisor’s Tablet for review.
- The second level is where the Supervisor sends the Team’s Data to Head Office (HQ) (2021 PES Main Server)
- The third level is where an Enumerator syncs to the 2021 PES Enumerators Server,
- Indicate that these three ways constitute the data flow in the CAPI Application operations. Explain why this approach has been adopted. Discuss the three-level data flow with trainees Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

10.6 REVISION

Discuss the following questions with the trainees to evaluate their knowledge and understanding.

1. Discuss the responsibilities of Field Officers regarding the use of Tablets for the 2021 PES.
2. Demonstrate (orally and practically) how to use ALL the functions of the Tablet.
3. Discuss the relevance of the rules governing the handling of Tablets in the 2021 PES.
4. Describe how one can carry out basic Table troubleshooting.
5. Enumerate the benefits in using CAPI in the 2021 PES.
6. Describe the three-level data flow in the 2021 PES CAPI Application operations. If there are gaps based on the responses provided, you need to revisit the specific discussion(s). Inform the trainees about the next topic for discussion.

CHAPTER 12

PRESENTATION ELEVEN: LISTING OF STRUCTURES

12.1 INTRODUCTION

Listing of structures is a major component of the 2021 TPES 2. Listing of structures is an exercise where special serial numbers are assigned to structures in every Enumeration Area (EA) for purposes of identifying all the structures for the actual enumeration. All structures (except embassies) must be identified and listed to ensure complete coverage. This presentation focuses on the concept of a structure and the procedures of listing.

12.2 PURPOSE

The purpose of this presentation is to equip trainees with knowledge and skills to list structures in the assigned areas.

12.3 LEARNING OUTCOMES

The purpose of this presentation is to equip trainees with knowledge and skills to list structures in the assigned areas.

By the end of this presentation, trainees should be able to:

1. Explain the concept of a structure;
2. Identify the various types of structures;
3. Apply the concepts and procedures to ensure a complete listing of structures in the assigned areas; and
4. Demonstrate the ability to list structures in a systematic manner (serpentine, sequential or other logical way, but NEVER haphazard) in the assigned area(s).

12.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation

- Projector
- Laptop
- Presentation slides
- Field Officer's Manual
- Hard copies of EA, SA Maps
- Tablets/CAPI

12.5 CONTENT

12.5.1 Why Listing in PES

Briefly discuss with the trainees the reasons for listing structures in PES and **emphasise** that it helps to achieve the following:

- Ensure complete coverage of structures:
 - ❖ Completed and uncompleted structures; and
 - ❖ Residential and non-residential structures.
- Identify all households, institutional population and the location of outdoor sleepers in the EA for actual enumeration.

12.6 CONTENT

12.6.1 Concepts and Definitions

Let the trainees present their views about the concept of structure. Ask them to read Chapter 5, Section 5.2 of the Field Officer's Manual. Discuss with them the concept of structure. **Emphasise** the following features of a structure to the trainees:

- Completed or uncompleted;
- Residential or non-residential;
- Occupied or unoccupied; and
- Movable or fixed.

Stress also, these key features of a structure: separateness, independence, completed or uncompleted. Again, seek the views of trainees on the concept of level of completion. Refer them to Section 5.2. Then discuss with them the concept of level of completion (which refers to the stage at which the structure is constructed/built). Present the various levels of completion of structures that have been outlined for the purposes of the 2021 PES.

Draw the attention of the trainees to the following:

- For uncompleted structures, only those above window-level should be considered.
- Table kiosk or structures that are below window-level should not be considered.
- A structure does not necessarily need to be surrounded by a wall, fence or hedge.

Furthermore, ask the trainees to present their opinions on the concept of listing. Let them read about it in Section 5.2. Then discuss with them the concept of listing. Discuss with the trainees the three main components of listing presented below.

1. Level of completion of structures
2. Types of structures
3. Use of structures Point out to the trainees that listing of structures is important for achieving complete and accurate enumeration during the 2021 PES. Task the trainees to refer to Chapter 5, Sections 5.2.2 and 5.2.3, and ask them to read about housing unit and dwelling unit. Let them draw the difference between these two concepts. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

12.6.2 Level of completion

Ask the trainees to refer to Section 9.4 and let them, briefly, identify the levels of completion.

1. Fully completed
2. Fully roofed but uncompleted

3. Partially roofed
4. Roofing level (with improvised roof)
5. Lintel level (with improvised roof)
6. Roofing level (without roof)
7. Lintel level (without roof)
8. Window level
9. Concrete/metal pillars level Emphasise that the following structures must be listed using these specific approaches:

- For block of flats, list each flat separately. Start from the top floor to the ground floor.
- Every detached structure should be listed separately.

- For semi-detached structures, each structure should be listed separately.
- For a compound/plot with more than one structure, whether walled or not walled, list each of the structures separately.
 - Each group of huts on one compound/plot whether walled or not walled should be listed separately.
 - A group of huts with interlinked wall should be given one serial number.
- Containers and kiosks, irrespective of where they are placed, should be listed separately.

Stress that the following are not to be listed during the 2021 PES:

- Hen coops;
- Table kiosks/Table-top stalls;
- Structures under construction below window level or at foundation level; and
- Separate short-walled bath houses (referred to as ‘show-your-neck’ in some areas).

Refer the trainees to Chapter 7, Section 7.2. of the Field Officer’s Manual, and take them through the steps involved in writing the special number including the 4-digit serial number to be written on the structure. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

12.6.3 Procedures for Listing of Structures

Ask the trainees to share their views on serpentine pattern of movement. Let them read Section. Then discuss the concept of serpentine (with pictures or sketches) and highlight that the purpose is to ensure a complete coverage of all structures in an assigned EA. Take the trainees through this serpentine procedure in listing of structures. Using the sketch on Slide 14 – 18, call out, at least three trainees, to demonstrate on flip chart/board/screen how to use the serpentine approach to list all the structures. Refer the trainees to Section 7.3.1 of the Field Officer’s Manual, and take them through the steps involved in writing the special number, including the 4-digit serial number to be written on the structure. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate responses.

12.6.4 Listing in Type 3 EAs

Review the previous knowledge of trainees on the types of EAs. Proceed to discuss how structures in Type 3 EAs should be listed. Refer them to Section 7.4, and take them through the following steps:

1. Start to list the structures from the base locality.

2. Complete listing of structures in one locality before moving to the next locality in the same EA.
3. Continue the serial numbering in the next locality from where the previous locality ended. Let, at least, two of the trainees demonstrate by using an EA with several localities to show how the 4-digit serial numbering should be written from one locality to the other.

12.7 REVISION

Present a summary of the presentation. Use the following questions to evaluate the knowledge and understanding of the trainees.

1. What is a structure?
2. What are the key features of a structure?
3. All structures will be listed during the listing exercise irrespective of the type. True or False? Explain choice of answer.
4. Different structures on the same compound with a fence wall will be assigned the same structure number. True or False? Explain choice of answer.
5. Semi-detached structures should be listed separately. True or false? Explain choice of answer.
6. A group of huts joined together with a wall must be listed as one structure. True or False? Explain choice of answer.
7. Describe how listing should be done? (Present the sketch in Slide 18 for this demonstration)
8. How should the numbers on the structures be written?
9. Mention the levels of completion of structures to list during the listing exercise.
10. An enumerator has been assigned an EA with three localities. There are 26, 14 and 6 structures in the first, second and third localities, respectively. What structure numbers should the enumerator assign to:
 - I. Last structure in the first locality?
 - II. First structure in the second locality?
 - III. Third structure in the second locality?
 - IV. Last structure in the second locality?
 - V. Last structure in the third locality? If there are gaps based on the responses provided, you need to revisit the specific discussion(s).

Inform the trainees about the next topic for discussion.

CHAPTER 13

PRESENTATION TWELVE: COMPLETING THE LISTING FORM

13.1 INTRODUCTION

Before PES enumeration, special serial numbers are assigned to structures in every Enumeration Area (EA) for the purpose of identifying the structures for actual enumeration. The procedure for undertaking this exercise is termed listing operation. The listing operation will be carried out using the Listing Form to keep records of the listing operation and enumeration. This is aimed at ensuring complete coverage of all persons and structures. This presentation deals with the concept of a structure, how to conduct listing and complete the listing form. The presentation on completing the listing form is from L01- L17.

13.2 PURPOSE

The purpose of the presentation is to equip Trainees with the requisite knowledge and skills to be able to complete questions L01-L17 of the listing form accurately.

13.3 LEARNING OUTCOMES

By the end of this presentation trainees should be able to:

- Complete the details of structure identification
- Distinguish between the different levels of completion of structures
- Distinguish between the different types of structures
- Recorded responses accurately to complete the listing form.

13.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation

- Projector
- Laptop
- Presentation slides
- Field Officer's Manual
- Listing Form (CAPI)

13.5 CONTENT

Begin the lesson with a recap of the following concepts and definitions:

- Structure
- Level of completion

- Type of structure
- Household
- Housing unit
- Vacant Housing Unit
- Dwelling unit

13.5.1 .Concept of Structure and Level of Completion

Explain the concept of structures and their importance in the 2021 PES, pay particular attention to the features of structures namely, **separateness** and **independence** and being either **completed or uncompleted** (see question L06 in Chapter 9, page 93).

Point out that a structure can be residential (i.e. a housing unit) or non-residential. Residential structures can be occupied or vacant.

Take trainees through the various level of completion with the aid of pictures.

NOTE:

- For uncompleted structures, only those above window level should be listed.
- Table kiosk or structures that are below window level should **not** be listed.
- A structure does not necessarily need to be surrounded by a wall, fence or a hedge.

Discuss the different types of structures (See pictures at pages 94-95).

13.5.2 Concept of Housing Unit

Define housing unit as a separate and independent place of abode that is intended for habitation by one household, but that may be occupied by more than one household or by a part of a household.

Emphasize that a structure can be a housing unit or have several housing units.

13.5.3 Concept of Dwelling Unit

Discuss the concept of a dwelling unit with emphasis on the following:

- A dwelling unit is a single unit that could provide living facilities for a household or households
- The unit could be part of a structure or an entire structure serving as a home or residence.

A dwelling unit may have one or more rooms which are occupied at the time of the census.

It includes, units within compound house, apartment building, detached, semi-detached house and kiosk/container.

Explain that Vacant Housing Unit is a housing unit that is not being occupied. Housing Units that are occupied are Dwelling Units.

13.5.4 Concept of Household

Let trainees understand that a household is a person or group of persons (related or unrelated) who live together (within the same physical space), share housekeeping (eating and sleeping) arrangements and recognize one person as the head.

13.5.5 Completing the Listing Form L01-L17

Discuss with trainees the use of the Listing Form with emphasis on the following:

- It is a form designed to record information on structures, and summary household information during listing of structures in the 2021 PES. The listing process guides in identifying the population in the structures for enumeration.
- Used to achieve complete coverage of dwelling units/structures and ensure orderly enumeration.
- Used in identifying facilities within the Enumeration Areas (EAs).

Take trainees through the Listing form L01 – L17

13.6 REVISION

1. Distinguish between
 - structure and housing unit
 - dwelling unit and vacant housing unit
2. What is a household?
3. Use the information below to complete questions L01 to L15 of the Listing Form.

In EA number 098 at Tutu in the Akuapem North District, 3 structures were numbered 0021, 0022 and 0023. Structure 0021 which belongs to Opanyin Obeng Kwasi with house No. TA 048/2, and is near the night market is a single detached fully completed house and used only for residential purpose. Structure 0022 is a two-storey building with the first floor having a concrete slab roof (floored). The structure has the inscription Nyame na Aye and it is near the Presby church. This structure has stores in front used for selling provisions and houses tenants as well. The third structure (0023) is a multiple storey building behind the Presby school park. It is a fully completed building used as a hostel for students of the Presby Secondary School. Structures 0021 and 0023 have displayed on the walls Ghana Post Digital Addresses AN-0781-0954 and AN-0765-0873 respectively.

CHAPTER 14

PRESENTATION THIRTEEN: HOW TO COMPLETE THE PES QUESTIONNAIRE

14.1 INTRODUCTION

Socio-demographic characteristics constitute a core component of the information to be collected on the population. These characteristics cover a wide range of issues which are important for analyses of other features in a PES. This presentation introduces trainees to the elements of socio-demographic characteristics of a population.

14.2 PURPOSE

The purpose of this presentation is to develop the capacity of trainees to be able to collect information on the socio-demographic characteristics of the population.

14.3 LEARNING OUTCOMES

By the end of the presentation trainees should be able to:

- Identify the elements of socio-demographic characteristics of the population (e.g. age, sex, date of birth, marital status, and religious affiliation).

14.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation

- Projector
- Laptop
- Presentation slides
- Field Officer's Manual
- PES Questionnaire

14.5 CONTENT

14.5.1 Rationale for collecting socio-demographic data

Let trainees discuss their understanding of the concept of socio-demographic characteristics. Note the responses given and use that as basis for explaining the concept.

Ask trainees to share their views about the reason for collecting socio-demographic information. Discuss with them highlighting the importance of such information (Chapter 11).

Emphasise that questions are to be administered to individual members of the household. Steps to follow if the individual is not available to answer.

1. The household head or knowledgeable member of the household should be asked to answer these questions on their behalf.

2. If no one can answer these questions at the time of the visit, make a call-back – ask when that person will be available and schedule a visit accordingly. Attempt up to three (3) call-backs.
3. As a last resort, if your call-back is unsuccessful, ask if the person can be reached via phone. If so, arrange for a telephone interview to enumerate the person or that household.

14.5.2 Names of usual household members

Guide trainees to copy information from C01 ensuring that it is copied in the same order as it has been listed in C01 i.e. usual household members (status A) and visitors (status B) present.

14.5.3 Date of birth (Read C08)

Guide trainees to show how date of birth must be recorded in full i.e. Day, Month and Year in the boxes provided. If the respondent does not know the Day and/or Month but the Year, record '98' for the Day and/or Month.

Emphasise that Year of birth must be obtained and recorded (Refer to Appendix 1 for historical events).

14.5.4 Age (Read C07)

Discuss with trainees the concept of age in completed years only. Use practical examples to throw more light on the following:

- If Adwoa is 16 years 6 months as at Census Night, her age is 16 years.
- If a child is 11-month-old as at Census Night, the age is zero (0).

Stress that Age should be recorded as three digits.

Practical Exercise

Ask trainees to fill out the ages of the following respondents:

1. Kwame is 25 years 6 months – record as 025
2. Kweku is 2 years old record 02 - record as 002
3. Adwoa is 20 years 11 months - record as 020
4. Yaa is 11 months old - record as 000.

14.5.5 Religion (Read C09)

Ask trainees to mention their religious affiliation. Stress that it is the religious affiliation and not the name of his/her church (refer Chapter 11, page 113 of the Field Officer's Manual).

Emphasis

Stress to trainees that under no circumstance should they (trainees) assume that

- Every member of the household, especially the children, belong to the same religious affiliation as the head or head's spouse;
- They can use a respondent's name to determine his/her religious affiliation. For example, Kofi Yahaya can be a Pentecostal or Yaw Antwi can be a Muslim.

14.5.6 Marital status (Read C10)

Point out to trainees that eligibility to respond to question C10 is age 12 years or older (refer to Chapter 12 of Field Officer's Manual).

14.5.7 Highest level of Education (Read C11)

Point out to trainees that eligibility to respond to question C11 is age 3 years or older (refer to Chapter 11 of Field Officer's Manual).

14.6 REVISION

Use the scenarios indicated below to revise issues raised in the presentation:

- Pair trainees to fill the section on the socio-demographic characteristics.
- Let two or three trainees volunteer to share the information they collected.

CHAPTER 15

PRESENTATION FOURTEEN: DATA QUALITY MONITORING

15.1 INTRODUCTION

The requirements to collect high quality data and timely release of the results are central to the goal of the Ghana 2021 PES, and in accordance with international standards. In view of this, data quality assurance mechanisms have been established at all levels (national, zonal, SA and EA) involving various actors and the logical validation rules found in the CAPI application. The use of CAPI allows for near real-time data quality checks during field data collection and processing. The outcome of the data quality processes informs the clearance of field officers.

15.2 PURPOSE

The purpose of the presentation is to equip trainees with the procedures of field data quality monitoring and management in relation to the roles and responsibilities of the actors in the PES data collection exercise.

15.3 LEARNING OUTCOMES

At the end of this presentation, participants should be able to:

1. Explain the concept of data quality monitoring and management in the PES.
2. Explain the benefits of field data quality monitoring and management in the PES
3. Identify and demonstrate the specific roles of the different categories of field officers in achieving *near real-time data monitoring*.
4. Explain the procedures to follow in wrapping up fieldwork activities and requirements for exiting the field.

15.4 TEACHING AND LEARNING MATERIALS

The following materials will be used at different stages of the presentation:

- Projector
- Laptop
- Field Officer's Manual
- PowerPoint Presentation Slides

15.5 WHY DATA QUALITY MONITORING IN PES

Engage the trainees to share their understanding on why data quality monitoring is relevant in the 2021 PES. Refer them to Chapter 14, Section 14.3 in the field officer's manual, and briefly discuss the following with them.

The Field Data Quality Management for 2021 PES begins at the EA level to the District level. Zonal Data Quality Monitors (ZDQM) will have responsibility for monitoring data quality within a Zone. The National Data Quality Monitor (NDQM) who will be based at the Head Office (HQ) which has oversight responsibility for monitoring data quality.

15.6 CONTENT

15.6.1 Concepts and Definitions

Let the trainees (at least two) share their views about the concept of field data quality monitoring. Refer them to read Chapter 14, Section 14.2 of the Field Officer's Manual, and proceed to discuss with them the concept of data quality monitoring. Also, task the trainees (at least two) to read Section 14.2, and then proceed to discuss with them the concept of field data quality management. Ask the trainees (at least two) talk about their knowledge on the concept of near real time data. Let them read Section 14.2, then discuss with them the concept of near real time.

15.6.2 Enumerators' Duty in Data Quality Monitoring

Let the trainees read Section 14.7. Discuss with them the roles they have to play to conduct data quality monitoring in PES and the relevance of these roles to data quality assurance.

15.6.3 Supervisors' Duty in Data Quality Monitoring

Task the trainees to read Section 14.7 on supervisors' Duty in Data Quality Monitoring within the respective District. Point out to the trainees the specific functions of Supervisors towards achieving data quality at the district level. Emphasise to them that Supervisors are to report any challenge they face on the field to the ZDQM. Also, discuss with the trainees the day-to-day activities of the DDQM.

15.6.4 Error messages and Clearance in PES of field officers

Discuss with trainees some error messages clearance procedure for field officers. Task the trainees to read Section 14.6.4. Proceed to discuss with them the processes involved in wrapping up field work. Stress that the outcome of the data quality processes will determine the clearance of Field Officers. Indicate to the trainees that final payment of remuneration will be done after clearance. Allow the trainees to ask questions. Engage them to respond to questions posed before you present the accurate answers.

15.7 REVISION

Present a summary of the presentation. Use the questions below to assess the knowledge and understanding of the trainees.

1. What is Field Data Quality Monitoring?
2. What are the requirements and criteria to be met before an enumerator exits the field (i.e., going for clearance)
3. Identify 5 roles of the Enumerators and Supervisors in ensuring data quality?

If there are gaps based on the responses provided, you need to revisit the specific discussio

CHAPTER 16

PRESENTATION FIFTEEN: DATA QUALITY MONITORING AND CLEARANCE

16.1 INTRODUCTION

The requirement to collect high quality data and timely release of the results are central to the goal of the Ghana 2021 PES, in accordance with international standards. In view of this, data quality assurance mechanisms have been established at all levels (national, regional, district, SA and EA) involving various actors and the logical validation rules found in the CAPI application.

16.2 PURPOSE

This presentation is to equip trainees with the procedures of field data quality monitoring and management in relation to the roles and responsibilities of the actors (all enumerators, supervisors, district data quality management team) in the Census data collection exercise. It also seeks to equip trainees with the processes involved in wrapping up field work.

16.3 LEARNING OUTCOMES

By the end of this presentation, participants should be able to:

Explain the concept of data quality monitoring and management in the 2021 PES

Explain the benefits of field data quality monitoring and management in the 2021 PES

Identify and demonstrate the specific roles of the different categories of field officers in achieving near *real-time data monitoring*.

Explain the procedures to follow in wrapping up fieldwork activities and requirements for exiting the field.

16.4 TEACHING MATERIALS

- Computer
- Flip chart
- Markers
- Projector
- Presentation slides

16.5 CONTENT

16.5.1 Scope of Data Quality Monitoring and Clearance

Discuss with trainees what they understand about data quality (Accuracy, reliability, timeliness, completeness, etc).

Explain the concept of Field data quality monitoring and Field data quality management to trainees.

Explain the procedures to be followed in wrapping up fieldwork activities and requirements for exiting the field.

Explain the concept of near real time data to trainees.

Ask trainees to share their views on how high-quality data could be collected from the field and the role they would have to play in achieving that. Discuss the issues with them and let them appreciate the importance of monitoring field data collection.

16.5.2 Zonal Data Quality Management Team (ZDQMT)

Discuss the composition and role of the Data Quality Management at all levels with the trainees and let them know who to contact when they encounter problems on the field. Stress on the role of the Enumerator and Supervisor in collecting quality data.

Emphasize on the role of the ZDQMT in achieving data quality at the district level with particular reference to the Data Monitor (DM), Field Supervisor (FS) and the Zonal IT Support (ZIT)

Explain to them the day-to-day activities of the ZDQMT which are: Data quality monitoring, field visits, quality checks, data transmission, problem resolution, troubleshooting all IT related issues and Clearance of field officers. Let them know that their work would be monitored right from the field.

16.5.3 Syncing of data

Stress on the need for daily syncing of data by both the Enumerator and Supervisor to HQ. Stress that daily syncing of data will enable the Data monitor to generate reports to assess progress of work by each enumerator and advice accordingly.

16.5.4 Correction of Errors

Let trainees know that the errors and inconsistencies in their work will be communicated to them for the necessary corrections. The supervisor should guide the enumerator to resolve the errors. Stress on the need to resolve errors and inconsistencies promptly to avoid repetition of such mistakes in subsequent enumeration. Stress on the need for Enumerators to re-sync the data to the Supervisor and HQ after the corrections have been made. The Supervisor should also re-sync the corrected data to HQ.

16.5.5 Clearance

Let them know the items they are expected to submit to the PES Secretariat at the end of field work and discuss the processes involved in wrapping up field work. Stress that the outcome of the data quality processes informs the clearance of field staff including final payment of their remuneration

CHAPTER 17

PRESENTATION SIXTEEN: LEADERSHIP OF THE FIELD SUPERVISOR

17.1 INTRODUCTION

In Presentation Two of this Manual, the roles and behaviour of field officers, namely the Enumerator and the Supervisor, have been discussed. Some of the roles are general while others are specific. In this presentation, the focus is on additional duties of the Supervisor before, during and after the enumeration and census exercises. Performance of these duties are crucial to the success of the enumeration, and by extension, the 2021 PES.

17.2 PURPOSE

The purpose of this presentation is to equip trainees with the requisite knowledge on what is expected of them and the skills to perform their duties before, during and after enumeration.

17.3 LEARNING OUTCOMES

1. Describe and apply the functions of the Supervisor;
2. Follow and apply the guidelines of assigning and monitoring the work of enumerators;
3. Follow and apply guidelines for conducting re-interviews;
4. Explain measures to ensure complete coverage;
5. Explain measures to ensure collection of quality data;
6. Address challenges that enumerators may come across in the field

17.4 TEACHING AND LEARNING MATERIALS

- Computer
- Projector
- Flip Chart
- Markers
- Presentation slides

17.5 CONTENT

17.5.1 Duties of the Supervisor Before enumeration

Review the previous relevant knowledge (PRK) of trainees: Ask them to recall the roles of Enumerators before enumeration. Let trainees also explain the relevance of each role identified.

After the discussion, ask trainees to identify the roles of the Supervisor before enumeration. Write them on the flip chart. Encourage them to explain each of the roles identified and the relevance to the success of enumeration and significance of quality census data and results. Present the duties of the Supervisor to the trainees and discuss with them (Use the presentation slides and Flip Chart).

Duties of Supervisors before enumeration include:

- Assist with the training of Enumerators when necessary.
- Go through the appropriate entry protocols
- Canvass the locality and EA to familiarize with the boundaries, institutions, structures, etc
- Assist Enumerators to identify their EA boundaries
- Expand the list of local historical events and distribute it to their Enumerators
- Work hand-in-hand with the chiefs, elders and opinion leaders of their localities in publicising the census.

Let trainees **distinguish** between the duties of the Enumerator and the Supervisor. Let them **highlight** issues about completeness, accuracy, consistency and daily submission of information.

17.5.2 Duties of the Supervisor DURING enumeration

Review the previous relevant knowledge (RPK) of the trainees: Ask them to recall the roles of Enumerators **during** enumeration. Let them also explain the relevance of each role identified.

After the discussion, ask trainees to identify the duties of the Supervisor **during** enumeration. Write them on the flip chart. Encourage them to explain each of the duties identified and the relevance to the success of enumeration and significance of quality census data and results. Present the roles of the Supervisor to the trainees and discuss with them.

Duties of the Supervisors during enumeration include:

- Supervise Enumerators during listing operation.
- Monitor field data collection during main enumeration
- Sync data daily to the Head Quarters
- Review enumerators' work by running reports of their work to check for gaps and duplicates.
- Conduct spot checks and re-interview
- Coach and retrain enumerators on the field
- Keep in constant touch with your Enumerators daily.
- Ensure that they are in the field at the prescribed time with enough of the necessary documents.
- Deal with difficult cases in the field;
- Check for partial save cases during field visits.

Let trainees **distinguish** between the duties of the Enumerator and the duties of the Supervisor. Further, **highlight** issues about completeness, accuracy, consistency and daily submission of information. Stress on the need to conduct re-interview to ensure data quality.

17.5.3 Duties of the Supervisor AFTER enumeration

Review the previous relevant knowledge (RPK) of trainees. Ask them to recall the duties of Enumerators **after** enumeration. Let them also explain the relevance of each duty identified.

After the discussion, ask trainees to identify the duties of the Supervisor **after** enumeration. Write them on the flip chart. Encourage them to explain each of the duties identified. Present the duties of Supervisors to trainees and discuss with them.

Duties of Supervisors after enumeration include:

- Ensuring EA Enumeration Result get to HQ via synching;
- Take over the Census Documents;
- Ensure all localities in type 3 EAs are visited and enumerated (Read Chapter 6; Sections 6.2 of the Field Officer's Manual);
- Checking Final Summary Sheet;
- Do final editing of Completed Questionnaires;
- Fill the Field Supervisor's Scrutiny Report;
- Hand over documents to the field monitor.

17.6 REVISION

The following sample questions could be used for revision:

(If not projecting, write them on the flip chart before training begins to save time)

- Before enumeration begins, what should the Supervisor do?
- What should the Supervisor do during enumeration?
- How is the Supervisor expected to work together with the Enumerator to ensure the success of enumeration?
- Enumerate the differences between the duties of the Enumerator and the Supervisor.
- What are the similarities and differences between the duties of the Enumerator and the Supervisor?
- Which other officers are the Supervisors expected to work with apart from the Enumerators, and why?