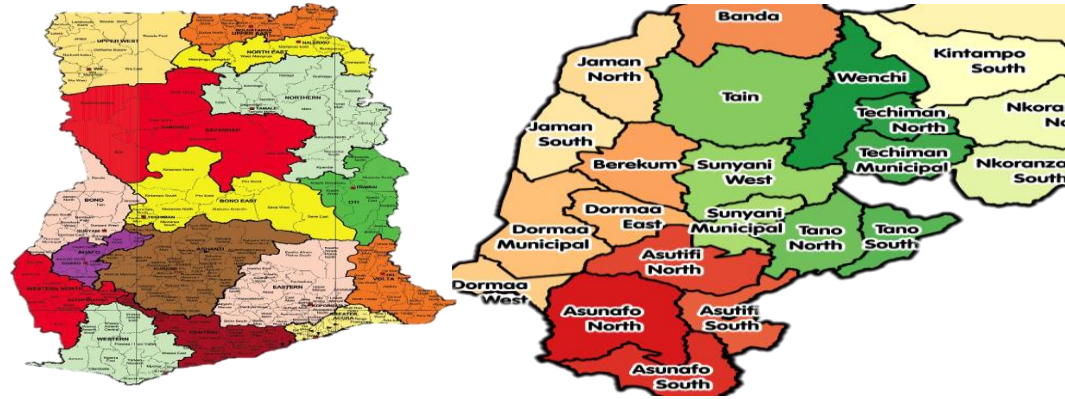


# GHANA 2023 INTEGRATED BUSINESS ESTABLISHMENT SURVEY I (IBES I)

## Use of Maps



November-December 2023



GHANA  
STATISTICAL SERVICE



GHANA 2023 INTEGRATED  
BUSINESS ESTABLISHMENT  
SURVEY (IBES)

*Data for Prudent  
Business Decisions*

# Outline of Presentation

1. Introduction
2. Purpose and Learning Outcomes
3. Concepts and Definition
4. Characteristics of a Map
5. Types of Enumeration Area (EA) Maps
6. Enumeration Zone (EZ)
7. Why the Use of Maps in Census
8. Steps to Locating an EZ
9. Modes of Identifying Structures
10. Workload Per EZ
11. Revision

# Introduction(1 /2)

## What is a Map?

- It is the representation of the entire earth surface or part of it on a piece of paper or other surface.
- It is a diagrammatic representation of an area of land or sea showing physical and man-made features.
- Maps generally have the following features, such as title, legend, scale and North arrow.

## Introduction(2/2)

- Maps used for data collection are essential for achieving complete coverage and accurate enumeration.
- It is important for Field Officers to be conversant with the procedures for using maps to accurately identify enumeration areas.

In the case of IBES, enumeration maps serve as the basis:

- to plan an effective enumeration of the assigned zone;
- for enumerators to locate the boundaries of their assigned zone;
- to identify all localities, list and enumerate all businesses; and
- for effective recruitment and distribution of logistics.

# Purpose and Learning outcomes

- The purpose of this presentation is to equip trainees with adequate knowledge on the use of EA map .
- At the end of this presentation, trainees should be able to:
  - 1.carry out EA map orientation and canvassing;
  - 2.distinguish between the 3 types of EAs;
  - 3.identify the features of an EA map;
  - 4.explain the components of the EZ Code;
  - 5.distinguish between EZ and EA maps; and
  - 6.identify any gaps or overlaps on their maps or EAs.

# Concepts and Definitions (1/2)

Concept	Definition
Locality	<ul style="list-style-type: none"><li>• This refers to an inhabited geographical area with a distinct name and well-defined boundaries.<ul style="list-style-type: none"><li>• It could be a hamlet, mining camp, ranch, farm, village, town, city or part of a town or city.</li><li>• A locality may contain one or multiple EAs.</li></ul></li></ul>
Enumeration Area	<ul style="list-style-type: none"><li>• It represents the smallest geographical unit with well-defined boundary that can be canvassed by an enumerator during the IBES period.<ul style="list-style-type: none"><li>• Each EA map has a description form (PHC 2) attached to a map which describes the boundaries of the EA and other relevant characteristics.</li></ul></li></ul>

## Concepts and Definitions (2/2)

Concept	Definition
<b>Enumeration Zone</b>	This is made up of one or more enumeration areas (EAs)
<b>Supervisory Zone</b>	This is a group of adjoining EZ Maps assigned to a Supervisor during the IBES period.
<b>District Map</b>	A District Map is a group of Supervisory Zone maps representing several Enumeration zones. District map covers an entire district as an administrative unit.
<b>Geographical Code</b>	This is a unique numeric identifier that is assigned to each EZ/EA EA Maps are assigned 10 digit geocodes



# Geographical areas and Geocodes

GEO AREA	CODES	RANGE	
Region	2-digits	01 - 16	This uniquely identifies each of the 16 regions
District	2-digits	01 – 43	This uniquely identifies each of the districts
District Type	1-digit	1 - 3	1 = District 2 = Municipal 3 = Metropolitan
Sub-Metro	2-digits	00 - 05	
EZ Number	3-digits	001-999	This uniquely identifies an EZ in a district



# Characteristics of a Map (2/2)

## LEGEND

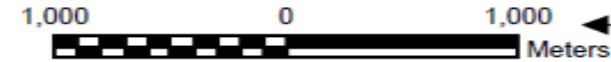
	Large Towns		First Class Road
	Towns and Villages		Second Class Road
	River (Indefinite)		Third Class Road
	River / Stream		Railway
	Marshy or Swampy Area		Track
	Footpath		Forest Reserve
			Enumeration Area
			Enumeration Zone

Legend- Rural Area

## LEGEND

	Point of Interest
	Forest Reserve Boundary
	River/ Stream
	Road
	Building
	Enumeration Area
	Enumeration Zone

Legend- Urban Area



Scale











North Arrow

Heading

GA CENTRAL MUNICIPAL  
CODE:0303  
ABLEKUMA  
E-ZONE: 001

# Characteristic of a Map (2/2)

**LEGEND**

	Borehole
	Chief's Palace/Hse
	Church
	Dam
	Drinking Spots
	Filling Station
	Hospital/Clinic
	Lorry Station
	Market
	Mosque
	Other
	Police Station
	Post Office
	School
	River/Stream
	River (Indefinite)
	Footpath
	Lane
	Road
	E.A. Boundary

**DORMAA WEST DISTRICT  
CODE 0901  
SA 5**

2,000 0 2,000  
Meters



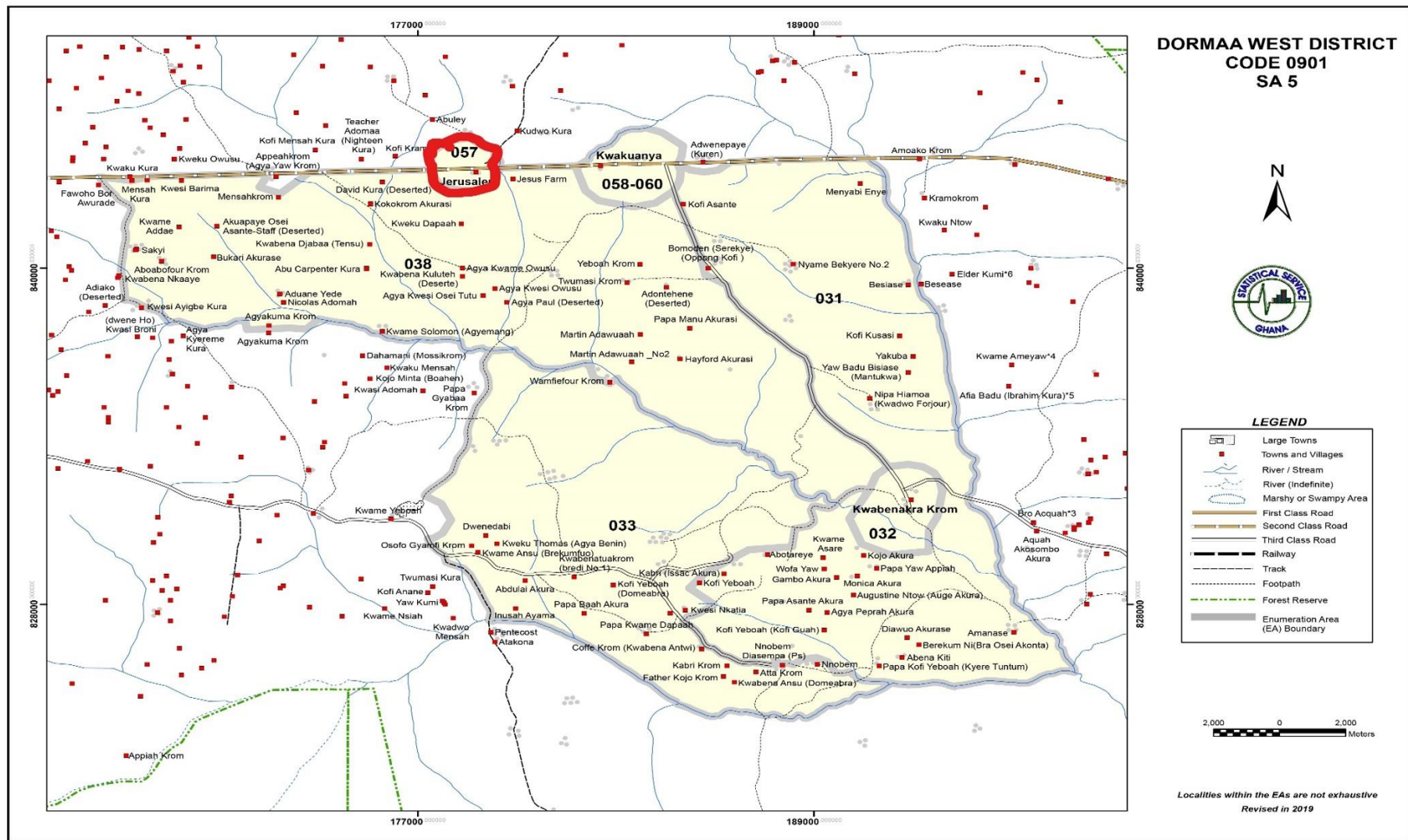
# Types of Enumeration Area (EA) Maps (1/3)

## Type 1 EA

Type 1 EA map represents an entire locality  
(one locality to one EA)

This is found in rural areas ( see figure on next slide)

# Example of Type 1 EA Map



## Common features of a Type 1 EA

- The red circled area is one locality.
- The whole locality constitutes the EA
- E.g. EA number 057
- Mostly found in rural areas.
- It may include new settlements around the locality
- Sometimes divided by roads

# Example of Type 1 EA Description Form (PHC 2)

13-May-19

GHANA STATISTICAL SERVICE



GPS: 0.0  
0.0

REPUBLIC OF GHANA  
PHC2

2020 POPULATION AND HOUSING CENSUS

GHANA AUTOMATED ENUMERATION AREA INFORMATION SYSTEM [GAEA-INFO]

1a. Region	Brong Ahafo Region	1b. Region No.	09
2a. District	DORMAA WEST	2b. District No.	0901
3b. District Type	District	3b. District Type No.	1
4a. Sub District	DORMAA WEST	4b. Sub District No.	00
5a. Base Locality Name	JERUSALEM	5b. Base Locality No.	01
6a. Locality Type	RURAL	6b. Locality No.	2
7a. 2010 EA Code	0704200028	EA Number	057
GhanaPostGPS	.	EA Base	JERUSALEM
EA Type	1		

2020 EA Code (Prov.).....: 0901100057

No. Localities	2010 PHC		2018 GCA		2020 Estimated.		2020 Enumerated	
	Enum.Pop	Enum.HseHd	Enum.Pop	Enum.HseHd	Est.Pop	Est.HseHd	Enum.Pop	Enum.HseHd
01 JERUSALEM	0	0	0	0	591	0	0	0

Boundary Description

**THE ENTIRE LOCALITY OF JERUSALEM CONSTITUTES THE ENUMERATION AREA .**

## Types of EA Maps (2/3)

### Type 2 EA

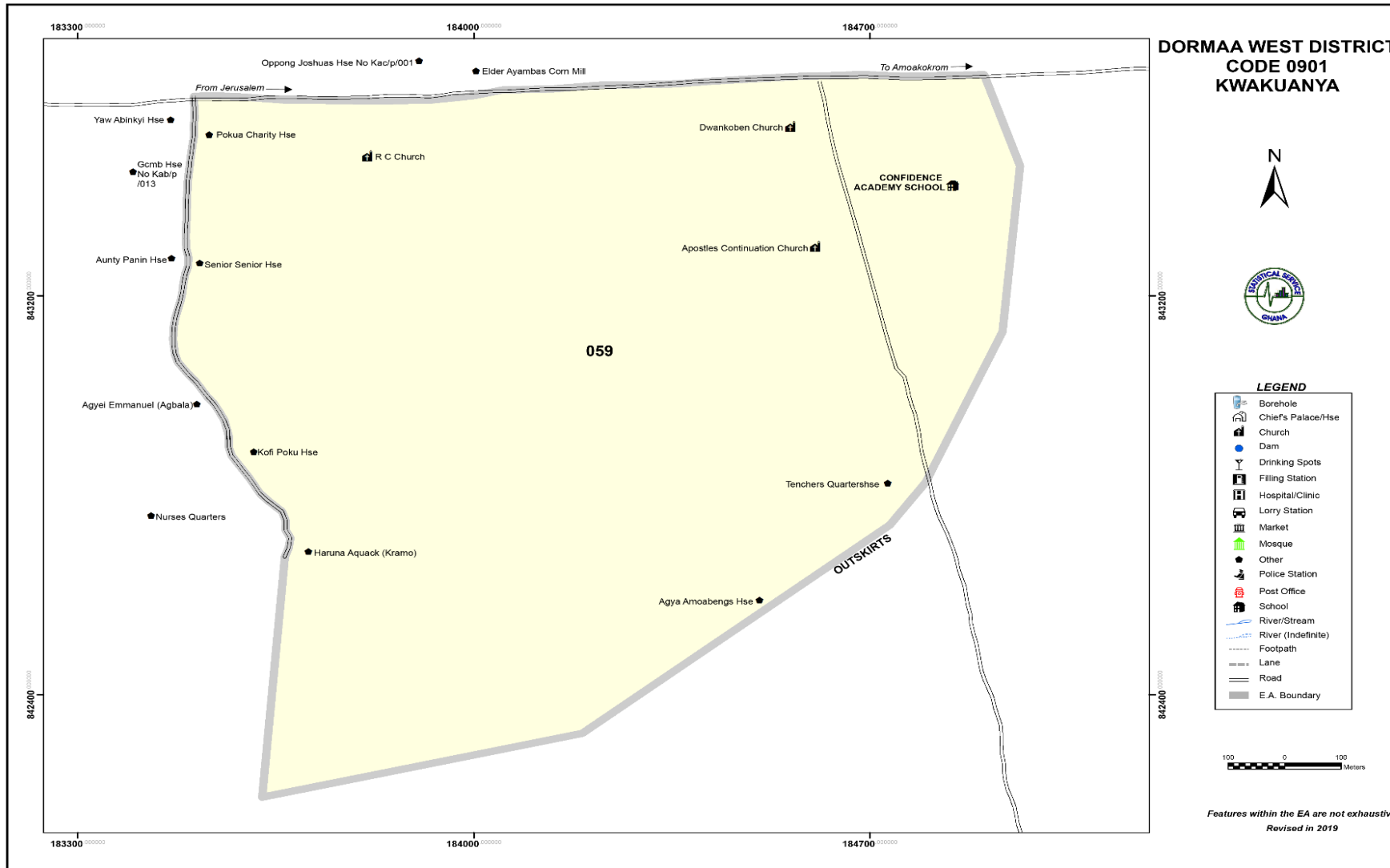
Type 2 EA map represents a part of a locality. Here, one locality is divided into two or more EAs (many EAs to one locality);

One locality having two or more EAs

EA boundaries are mostly formed by features such as streets, building, lanes, drains, railway lines etc.



# Example of Type 2 EA Map



## Common features of a Type 2 EA

- Normally found in large localities
- Localities with population greater than 750 are subdivided to form two or more EAs
- These are Type 2 EAs
- E.g., Osu in Accra has many EAs
- There are ground features dividing the EA, such as roads, lanes, etc
- These EAs share boundaries with other EAs.



# Example of Type 2 EA Description Form (PHC 2)

18-Oct-19

GHANA STATISTICAL SERVICE



GPS: 0.0  
0.0

REPUBLIC OF GHANA  
PHC2

2020 POPULATION AND HOUSING CENSUS

GHANA AUTOMATED ENUMERATION AREA INFORMATION SYSTEM [GAEA-INFO]

1a. Region	BONO	1b. Region No.	09
2a. District	DORMAA WEST	2b. District No.	0901
3b. District Type	District	3b. District Type No.	1
4a. Sub District	DORMAA WEST	4b. Sub District No.	00
5a. Base Locality Name	KWAKUANYA	5b. Base Locality No.	04
6a. Locality Type	RURAL	6b. Locality No	2
7a. 2010 EA Code	0724100030	EA Number	059
GhanaPostGPS	.	EA Base	CONFIDENCE ACADEMY SCHOOL
EA Type	2		

**2020 EA Code (Prov.).....: 0901100059**

No. Localities	2010 PHC		2018 GCA		2020 Estimated.		2020 Enumerated	
	Enum.Pop	Enum.HseHd	Enum.Pop	Enum.HseHd	Est.Pop	Est.HseHd	Enum.Pop	Enum.HseHd
04 KWAKUANYA								

### Boundary Description

Start from Yaw Abinkyi and Gcmb (Both excl), Pokua Charity (Incl). Move along the lane by-passing Aunty Panyin (Excl) and Senior-Senior (Incl). Proceed further to by-past Agyei Emmanuel (Agbala) (Excl), Kofi Poku and Haruna Aquack Kramo (Both incl). Turn left and follow the outskirt by-passing Agya Amoabeng, Teachers Quarters and Confidence Academy (All incl) to meet the Amoakokrom road. Turn left and move along the road by-passing Dwankobea church (Incl), Elder Ayamba cornmill (Excl) to meet Yaw Abinkyi and Gcmb (Both excl), Pokua Charity (Incl), your starting point.



# Types of EA Maps (3/3)

## Type 3 EA

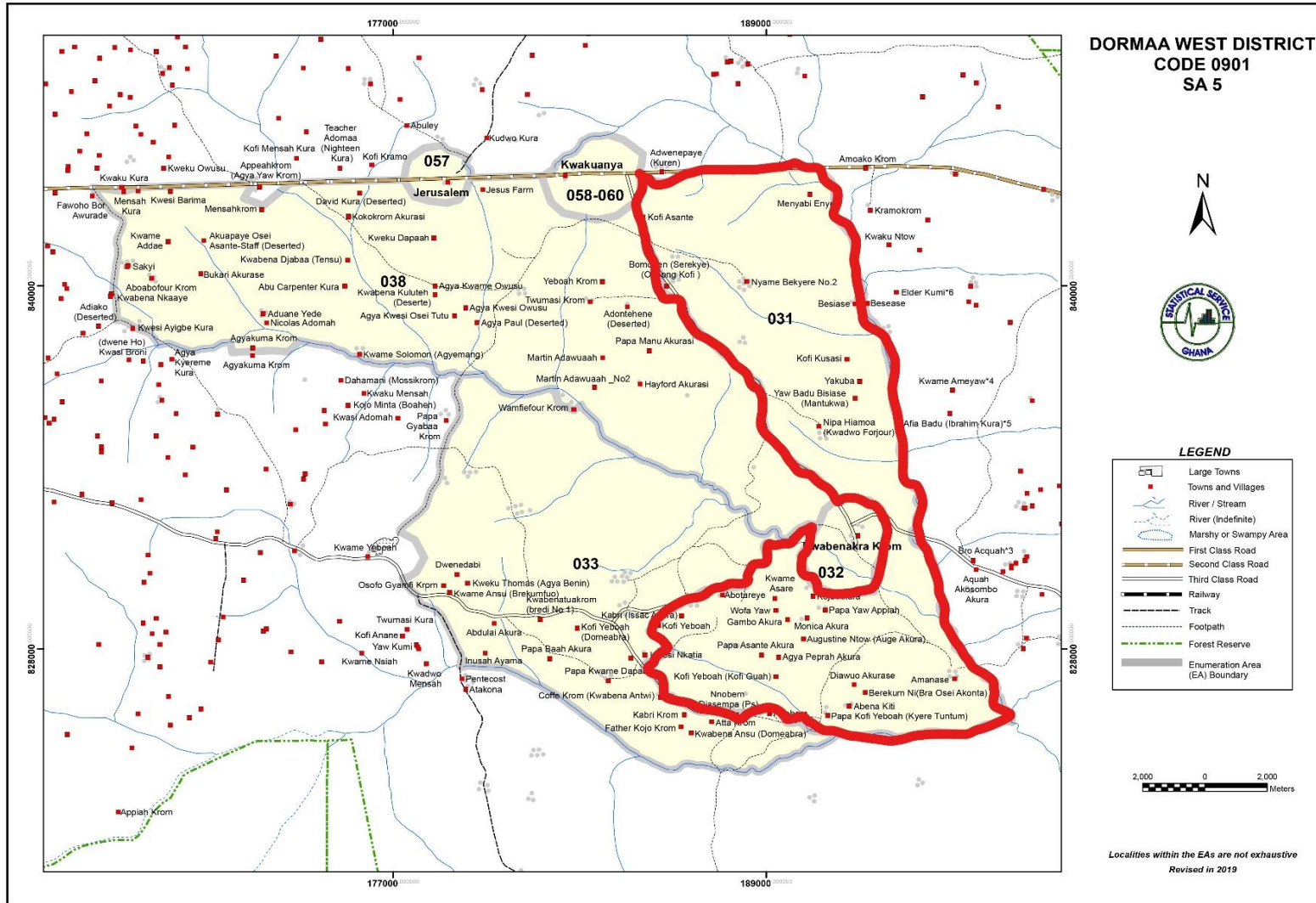
Type 3 EA map represents two or more localities put together to form one EA (one EA to many localities or many localities to one EA)

Type 3 EAs are the rural EAs

Its boundaries are mostly by natural and artificial features such as streams, rivers, mountains, roads and footpaths

See figure on next slide

# Example of Type 3 EA Map



## Common features of a Type 3 EA

- Made up of two or more localities to form the EA
- Usually put together due to proximity and the population of each locality
- Canvassing is done one locality after the other
- Most populous locality is considered as the base
- Examples are hamlets, farm houses, small villages (about 100 people)

# Example of Type 3 EA Description Form (PHC2)

5/11/2020

GHANA STATISTICAL SERVICE



GPS:

REPUBLIC OF GHANA  
PHC2

2020 POPULATION AND HOUSING CENSUS  
GHANA AUTOMATED ENUMERATION AREA INFORMATION SYSTEM [GAEA-INFO]

1a. Region	Greater Accra Region	1b. Region No.	03
2a. District	GA SOUTH	2b. District No.	0301
3b. District Type	MUNICIPAL	3b. District Type No.	2
4a. Sub District	GA SOUTH	4b. Sub District No.	00
5a. Base Locality Name	OCLOOKOPE	5b. Base Locality No.	01
6a. Locality Type	RURAL	6b. Locality No	2
7a. 2010 EA Code	03012006311	EA Number	330
GhanaPostGPS	.	EA Base	OCLOOKOPE
EA Type	3		

2020 EA Code (Prov.).....: **0301200330**

No. Localities	2010 PHC		2018 GCA		2020 Estimated.		2020 Enumerated	
	Enum.Pop	Enum.HseHd	Enum.Pop	Enum.HseHd	Est.Pop	Est.HseHd	Enum.Pop	Enum.HseHd
01 OCLOOKOPE					46			
02 TOGBE OCLOO					10			
03 THOMAS OCLOO					5			
04 GABESHIEKOPE					8			
05 OBED ASAMOAH FARMS					12			
06 GANNAT FARMS					12			
07 KUMA APALOOKOPE					12			
08 APALOO KWESIKOPE					20			
09 APALOO STEPHENKOPE					13			
10 KEY FARMS					12			
11 PEPPERKOPE					15			
12 KABU					10			
13 OKYEAME AKROWA					12			
14 KWAMI DZOLO (ZORO)					18			
15 AYIGBE KOFIKOPE					15			

17 GAPEKOPE (TAATA PAPA)					20			
18 GADRI AKWAKU					15			

### Boundary Description

START FROM THE OUTSKIRTS OF DOMIABRA AND FOLLOW THE DOMIABRA - DANCHIRA ROAD ROAD PAST OCLOOKOPE (INCL) TO MEET RIVER LARANU. TURN RIGHT AND FOLLOW THE RIVER TO MEET THE DENSU RIVER. TURN RIGHT AND MOVE ALONG THE DENSU TO MEET A STREAM. TURN RIGHT AND FOLLOW THE STREAM TO MEET TOGAHKOPE (EXCL). FROM TOGAHKOPE MOVE ALONG THE TOGAHKOPE - DOMIABRA ROAD TO MEET THE OUTSKIRTS OF DOMIABRA, THE STARTING POINT.



# Enumeration Zone (1/2)

For the purpose of IBES an Enumeration Zone (EZ) has been created

EZ(s) is/are created out of one or more Enumeration Areas (EAs) to be completed by an enumerator during the IBES enumeration period

The number of non-residential structures from the 2021 PHC guided the allocation of EAs to constitute EZs

A number of EZs have been put together for supervisors called Supervisory Zones (SZs)

An EZ will be assigned to an enumerator



# Enumeration Zones (2/2)

## Purpose of creating EZs

To have a well define boundaries that will confine the enumerator to an assigned area.

Prevent enumerator from leaving out any portion of the area assigned or stray into another zone.

## Zone composition

Estimated number of businesses forming an EZ in a metropolitan and regional capital is between 200-299

Estimated number of businesses for other EZs is between 300-399

# Why the Use of Maps in IBES?

Locate and identify the EA/EZ/SZ area(s) assigned to a Field Officer

Ensure that all businesses within the boundaries of the EAs/EZs are identified and enumerated to avoid any omissions

Guide Field Officers from wrongfully entering other Field Officers' areas of work, thereby avoiding multiple counting

Determine the number of Field Officers to be assigned to each district

Determine the number and type of logistics to be distributed to each district



## Steps to Locating an EA (1/3)

1. Understand and acquaint yourself with the map symbols and directions.
2. Orient your map correctly with the help of the North Arrow symbol on the map
3. Trace/canvass the EA boundary with the aid of the PHC 2
4. Use the EA description alongside the landmarks/ localities on the map as a guide to locate the assigned EA.
5. Identify the EA using EA name (base) for Type 2 EA and for Type 3 EA, look for the base locality.
6. Identify the starting point of the EA as indicated on the PHC 2.

## Steps to locating an EA (2/3)

7. Canvass the EA for Types 1 & 2 by systematically moving within and around the entire EA, segment by segment.
  - For EZ with type 1 EAs, where the entire locality is an EA,
    - pick a strategic point on the boundary of the locality or settlement
    - move along boundaries, lanes, paths, streets, and roads until all the businesses in residential and non-residential structures are enumerated in the locality or settlement.
  - For an EZ with type 2 EAs, the locality has more than one EA,
    - pick a strategic point on the boundary of one EA,
    - move along the boundary, lanes, paths, streets, and roads until all businesses in residential and non-residential structures are enumerated.

## Steps to locating an EA (3/3)

8. For Type 3 EAs, canvass the localities by systematically moving from one locality to the other, and moving around each locality.
  - For an EZ with type 3 EAs, where several localities constitute an EA,
    - start with the largest/most populous locality or the EA base,
    - pick a strategic point on the boundary of the locality or settlement
    - move along the boundaries, lanes, paths, streets, and roads until all businesses in the residential and non-residential structures in the locality are enumerated.
    - Repeat same process for subsequent localities or settlements and in the EA until all localities are completely enumerated.
9. The individual EA Maps, EZ Maps, SZ Maps, District Maps and the Descriptions (PHC2) complement one another; hence Supervisors/Enumerators should use them together.

# Revision

1. Describe how to carry out the following:
  - a. Map orientation
  - b. Canvassing
2. List the three types of EAs and show the differences between them.
3. Describe the type of EA in the training locality.
4. Mention at least five features of an EA map.
5. Identify the steps in locating an EZ.
6. Describe the components of an EZ code.

# THANK YOU

Please Any Question...?

