GIS FIELD SURVEY REPORT

Project Title

NGONG SMART WASTE MANAGEMENT AND REPORTING SYSTEM

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Sub Title : Report generated from QGIS Layout Manager using KoboCollect survey data

1. Introduction

This report presents the results of a GIS field data collection exercise conducted using Kobo Collect for mobile data collection and QGIS for spatial data processing and map production. The objective of the exercise was to collect accurate geographic coordinates, photographs, and attribute information for selected field features and visualize them on a map for analysis and documentation.

2. Objectives

To design and deploy a digital survey form using Kobo Toolbox

To collect georeferenced field data using Kobo Collect

To process and analyze collected data in QGIS

To produce a clear and professional map layout as evidence

3. Methodology

3.1 Data Collection

A survey form was created from scratch using Kobo Toolbox

Data collected included GPS location (geopoint), photographs, and descriptive attributes

Location accuracy was set to ensure reliable GPS readings

Field data was collected using the Kobo Collect mobile application

3.2 Data Processing

Submitted data was downloaded from Kobo Toolbox in CSV format

The CSV file was imported into QGIS as a point layer using latitude and longitude fields

Base maps were added for reference

3.3 Map Production

A map layout was created using the QGIS Print Layout tool

Map elements included title, legend, scale bar, north arrow, and data source

The final map was exported as a PDF/image for reporting

4. Tools Used

Kobo Toolbox & Kobo Collect

QGIS

Google Earth (for verification)

GPS-enabled mobile device

5.Evidence

Kobo form submissions

Georeferenced photographs

QGIS map layout (attached)

6. Results output snd drliverables

The collected data was successfully visualized on a map showing the spatial distribution of the surveyed features. Each point includes attribute information and photographic evidence, confirming accurate field data capture

7. Conclusion

The exercise demonstrated the effective use of Kobo Collect and QGIS for field data collection and spatial analysis. The workflow provides reliable geospatial evidence suitable for planning, reporting, and decision-making purposes. GIS-based reporting improves waste management decision-making.

8. Recommendation

County government should adopt digital waste reporting systems.