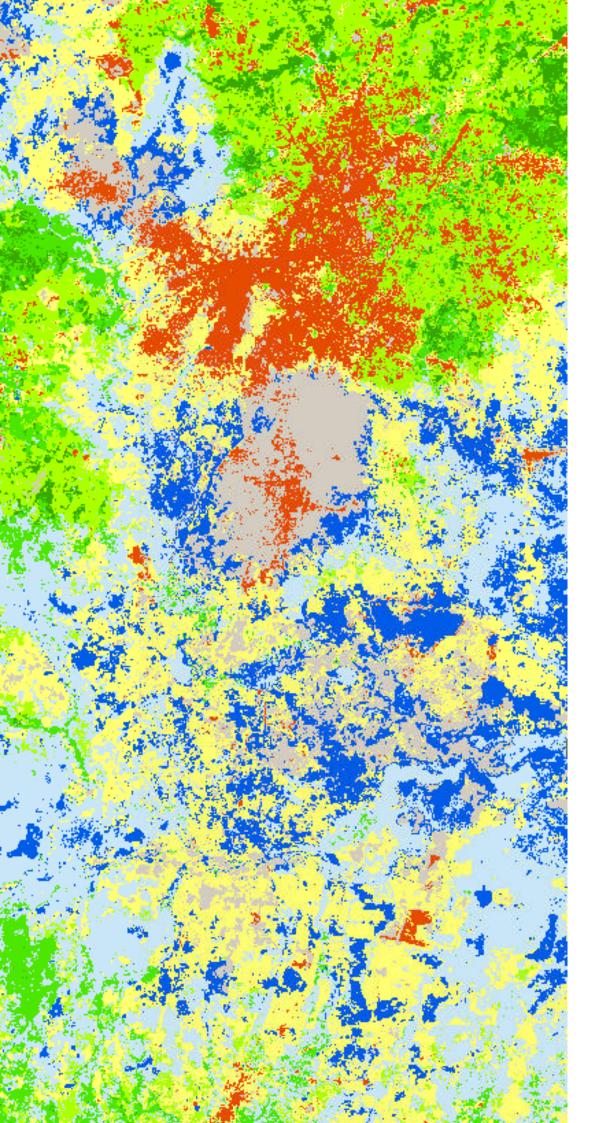
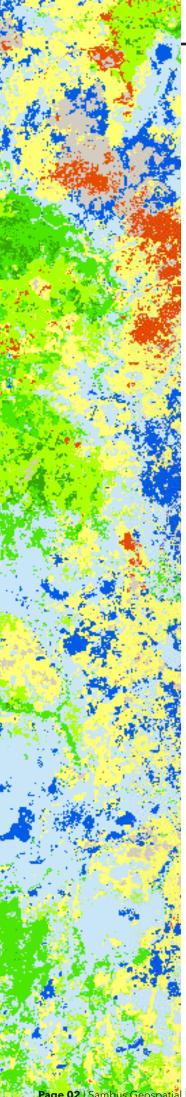
# Sambus Geospatial SIETHER

MARCH 2021 | 2<sup>ND</sup> EDITION



Page



# LETTER FROM THE M.D.

# A STRATEGY FOR SAMBUS GEOSPATIAL

This edition of our newsletter features the most recent developments in the geospatial industry today, prioritizing how location intelligence is spearheading digital transformation in the world.

Location Intelligence involves the people and technology used to conceptualize spatial data, recognizing trends and relationships that results in actionable information, helping to build on Geographical Information System (GIS) tools to come up with data driven insights that stretch across multiple cases. While it utilizes Internet of Things (IoT) data sources and GPS systems, location intelligence contributes immensely to the identification of patterns and trends to specific business modules which becomes very useful in making informed decisions.

At Sambus Geospatial, we seek to increasingly become the key to the induction of geospatial solutions to Africa and the rest of the world as we represent various geospatial giants, which are making a difference in the world today.

Sambus Geospatial Newsletter 2nd Edition illustrates how different industries are leveraging on spatial tools in a holistic manner for different projects, as it also introduces you to some of the newest products in the geospatial industry with the capability to integrate other systems, which have been launched to tackle specific problems in the contemporary society.

We hope and believe that, our efforts would be valuable in guiding everyone on the opportunities location intelligence offers for students, entrepreneurs, investors, and the governments.

Warm Regards



Akua Aboabea Aboah - Baffoe Managing Director | Sambus Geospatial

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OUR SERVICES CLIENT INTERVIEW





Sambus Geospatial is a Geographic Information System (GIS) and an applications development company that integrates technologies and provides a range of geospatial solutions. We have acquired an appreciable experience in the development and implementation of socio-economic and environmental related projects and methodologies using GIS.

# SERVICE(S)

We serve our clients and stakeholders and support them in reaching their corporate objectives. As part of our services, we also help with ESRI GIS software installation, project support and capacity building, with the most complete GIS platform — The ArcGIS Suite, an integated mapping, data management, planning and analysis, workforce optimization, and operational awareness platform, with a robust organizational database structure.

### PARTNER(S)

Our partnership with geospatial industry giants like Esri, Trimble, L3Harris and Wingtra, coupled with our many years of experience in the region has given us an edge in the implimentation of location intelligence solutions to support and empower decision making for Governments, NGO'S, Educational, Agro, Mining and similar Industries.

### **ESRI**

Esri was founded with the vision that computer based mapping and analysis would make significant contributions in the areas of geographic planning and environmental science. Sambus Geospatial provides geospatial solutions using esri technologies among other related services.

- ArcGIS Suite
- GIS Training
- Consultancy

### **TRIMBLE**

Sambus Geospatial is also the Authorized Resellers of Trimble GPS technology in West Africa. Trimble technologies integrates a wide range of positioning technologies including GPS, GNSS, laser, optical and inertial technologies with application software, wireless communications, and services to provide complete commercial solutions. See other products and services below.

- Mapping and GIS (GPS/GNSS devices)
- GPS Data Collection
- GPS Trainings
- Consultancy

## L3HARRIS

L3Harris provides various industries with cutting edge image data processing products. Premiering the software for extracting meaningful information from geospatial imagery with the latest image processing and analysis tools regardless of the image format you use. Sambus Geospatial is the official distributor of L3Harris data imagery software in West Africa.

### WINGTRA

WINGTRA - VTOL Mapping Drone used by professionals around the world for mapping and surveying applications to help improve decisions, reduce costs and risks, and improve returns on investment. Sambus Geospatial is an authorized dealer of WingtraOne VTOL mapping drone, used by geospatial specialists and industry professionals to capture aerial images for Surveying and GIS, Mining, Construction, Agriculture and Environmental Monitoring applications.

To learn moe about our products and services, Visit our website at www.sambusgeospatial.com or send us an email via info@sambusgeospatial.com today!



# DIVING INTO THE IMPACT OF THE USE OF LOCATION INTELLIGENCE SYSTEMS

Mr. Ernest Akyereko - Field Epidemiologist

Ghana Health Service - Emergency Operation Center, Disease Surveillance Department

# Kindly tell us a brief introduction about your professional expertise.

"I am a Skilled Field Epidemiologist who is very talented in dealing with tasks related to early detection, management and control of infectious diseases. I am also very Influential in the development of standards and guidelines in the surveillance and investigation of causes of pandemic diseases, and other ill health conditions. Furthermore, I hold the Solid ability to perform surveillance data analysis including geospatial analysis and modeling of infectious disease. Currently, I am functioning as the team lead in the COV-ID-19 data management and Situational Updates in Ghana"

# How were you introduced to the use of Geo Location Systems?

"This discipline was introduced in a training phase of my M.Phil. in Applied Epidemiology and Disease Control Programme. Later, I further pursued an MSc. in Geoinformation Science"

# What excites you most about your current position in this institution?

"Above all interests, what excite me most about my position is how it allows me to contribute to saving the lives of the people in the country I love most"

# Tell us how your institution utilizes geospatial technology in their workflows?

"Ghana Health Service (GHS) make use of geospatial technology in running various forms of data analysis and also generate a detailed visualization into specific findings. Since disease occur in space, geospatial analysis provides deeper understanding which helps to uncover spatial patterns relevant to the control of disease. In this case, the institution is currently using the technology to effectively monitor and visualize the COVID-19 Pandemic by developing a dashboard with infographics to effectively monitor the spread of the pandemic and also for internal decision-making purposes

# Can you share any of the challenges GHS faced prior to the integration of our GIS solution?

"Prior to the introduction of the technology, we publish data to the public without any locational analytics which could be displayed in an interactive dashboard for visualizing the ongoing outbreak. The main form of publication then, includes press releases, articles, blogs or video coverages. With the introduction of the Geo-systems, we now perform analytics to acquire deeper insights to further understand situations in order to make more informed decisions"

# What impact has the use of geospatial tools /GIS given to your company and you as an individual?

"A massive improvement has been seen in our work-flows as we now have the capacity to deeply analyze the data we have, and also visualize or display them in a more informative manner. The infographics makes it easier to deduce different form of information from our map outputs, and the dissemination of COVID-19 update has become more seamless in nature, achieving a near-real time function."

# Can you share your foresight on how this institution can advance in the use of GIS Technology?

"The institution can integrate it to our existing surveillance data management systems such as SOR-MAS to provide real-time data collection analysis and visualization"

# How would you recommend other utility industries to embrace location intelligence?

"Exploring the system and participating in user events serves as the best way an individual or a company can learn the potential capabilities of the use of location intelligence. The platform has a lot to offer in order to improve data analysis and visualize processed data to make great decisions"

# Any further advice you would like to give to the public on why they should embrace the use of GIS in their projects?

"I would like to urge the public to learn and embrace the use of Geospatial tool/GIS in their projects because, its potential is limitless. It has the ability to uncover critical location-based information for efficient decision making"

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# THE ARCGIS PLATFORM

# Introducing Esri's Platform—as—a—Service

uct called ArcGIS Platform. ArcGIS Platform is a location-focused platform-as-a-service (PaaS) for when you need to integrate location capabilities into your apps, business systems, and products. ArcGIS Platform provides access to Esri's powerful location services using your APIs of choice—including open-source APIs. It also allows you to create apps using ArcGIS APIs, SDKs, and app builders.

ArcGIS Platform delivers, as discrete services, the technology that powers Esri's own industry-leading mapping and spatial analytics products, which are used by thousands of organizations worldwide. With this level of access, you can build innovative solutions using the most comprehensive, high-quality set of location services, data, and mapping tools available.

# Bring your dev experience with you!

ArcGIS Platform allows you the flexibility to build apps using the client API that best fits your needs. You can work directly with our location services using open-source mapping libraries like Leaflet, GL JS, Open Layers, and ArcGIS REST JS. ArcGIS Platform also provides a set of full feature mapping APIs, SDKs, and services for building and deploying location-focused apps. This includes our ArcGIS API for JavaScript for web development, ArcGIS Runtime SDKs for mobile and desktop platforms, and low-code app builders.

# High-quality and comprehensive location ser-

ArcGIS Platform provides access to the most comprehensive, highest-quality set of location services available. With these services, you can build powerful capabilities into your apps and solutions and deliver amazing geospatial content. You can embed mapping and analytics capabilities in your apps—like data visualization, geocoding and search, directions and routing, and spatial analytics. You can supplement your data with ready-to-use basemaps and data services like demographics, points of interest (POIs), live feeds, imagery, and more, curated Visit www.esri.com for more information today! from authoritative data providers.

# Stay on budget.

We are very excited to announce our new prod- ArcGIS Platform provides developer-friendly pricing that allows you to pay only for what you need and scale as your needs grow. When you get started with your free account, you have access to generous allowances of location services transactions at no cost, then pay as you go for additional service usage. You can also deploy an unlimited number of apps at no extra cost. The new pricing calculator will help you determine your future costs based on your anticipated usage.

# Simplify deployment using cloud data hosting and

ArcGIS Platform offers cloud data hosting and storage to help you securely manage your data. When you store and host data using ArcGIS Platform, you maintain complete ownership over the data and control over its use. You can publish your data as hosted feature services, vector tile sets, and image tile sets that provide efficient caching and load times. Your app users can query these data sets, visualize them on maps, and use feature services in analytics.

# Reduce development time and effort.

Esri provides a robust developer experience to help you be successful with ArcGIS Platform. You can access a detailed developer guide that includes documentation and tutorials for our location services and tools, ready-to-use maps to get you started, and ready-to-use content to help you quickly bring your apps to life. We also provide documentation for third-party APIs, so you can learn how to work with our services using the APIs and web frameworks you are already familiar with. Together, these resources help you save time and effort when developing with ArcGIS Platform.

# Get started today.

We invite you to explore our new PaaS product to build (and enhance) amazing apps that will set you apart from your competition. We also look forward to providing future enhancements to ArcGIS Platform and encourage you to join us and let us know how we can serve you better.

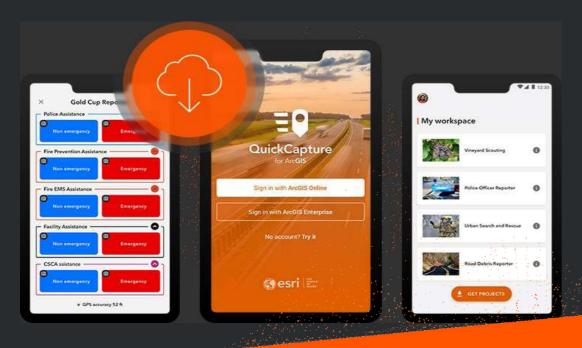


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# ArcGIS QuickCapture

The app for rapid data collection

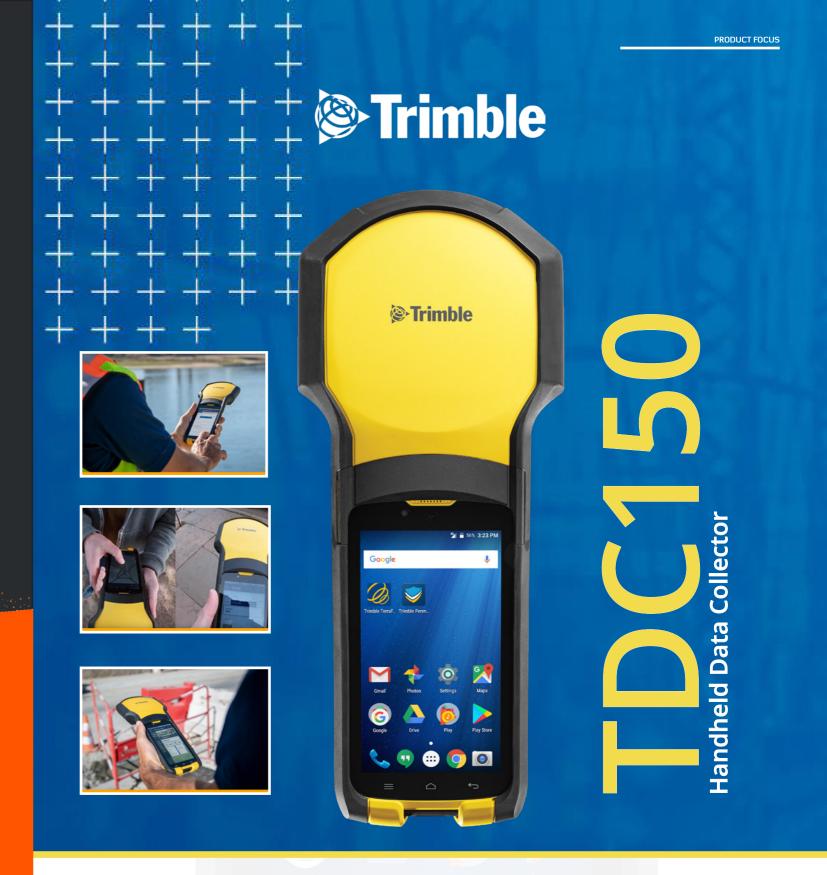


# Capture data with the touch of a button

ArcGIS QuickCapture is the fastest way to collect field observations. With this simple app, you can quickly record field observations from a moving vehicle while you scout locations, conduct aerial surveys, or assess damage. Send data back to the office for analysis in real time and eliminate time spent manually processing handwritten notes. ArcGIS QuickCapture is integrated with ArcGIS, so new data from the field can be used instantly for better decision-making.

Boost productivity, implement quickly with ArcGIS QuickCapture

www.esri.com



Trimble precision | Handheld convenience | Android simplicity

1-100 cm

GNSS Accuracy

Android 6.0

Operating System

13.4 cm / 5.3"

Screen Size

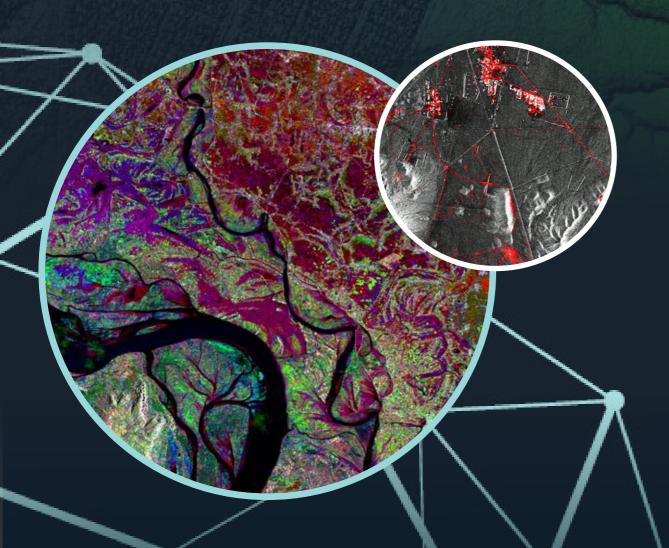
Visit geospatial.trimble.com for more information

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PRODUCT FOCUS



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Get access to the largest selection of geospatial products worldwide including satellite imagery, aerial maps, digital elevation model (DEM) data, topographic maps and aerial mapping services from L3Harris.

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ARTICLES & PUBLICATIONS

ARTICLES AND PUBLICATIONS



# ACHIEVING SUSTAINABLE AGRICULTURAL DEVELOPMENT THROUGH GIS

Agriculture has been the driving force of development and growth of many civilizations and economies. It is often referred to as the science of cultivating plants and rearing of livestock. Over time, industrial agriculture has revolutionized and as part of that change the sector has adopted more efficient and productive methods in cultivation and animal husbandry.

Today, the need for modern technology and its application to provide solutions to agriculture can be attributed to the creation of location intelligence systems which are capable of ensuring that the sustainable development goals are adhered to. Sustainable development expresses the notion on societies being able to handle their needs over a long period of time without having to depend on any other entity or body. However, in terms of contemporary agriculture, sustainability tends to deal with how the industry can leverage on renewable resources and technologies in modern ways to provide the needs of every society over a long period of time.

Governments and related authorities are putting in efforts to ensure that the future generation is not destitute of the resources they would need to live on, as this goal is captured in the aims listed out in the United Nations Sustainable Development Goals (UNSDGs). The development of agriculture and making it sustainable is not a new program, as it has been captured in the SDGs Goal 2; End hunger, achieve food security and improved nutrition and promote sustainable agriculture. What role then, can modern technological advancements like G.I.S. and its related applications play in achieving a sustainable agricultural development?

We find our example in Land Use and Land Cover, a widespread terminology used in the agricultural discipline as it evidently illustrates the diverse functions of land areas.

In terms of Site Management, G.I.S. can generate maps with data on the topographic nature of the land, soil type and quality among other attributes. This becomes useful for farmers as it aids them in making data driven decisions as to where to site their farms to increase yield, prevent soil erosion, regulate the use of fertilizers on the land and monitor the feeding of farm animals to keep a healthy livestock without destroying or disturbing the surrounding ecosystems.

In terms of data processing, GIS becomes very powerful as location Intelligence systems are capable of developing modules to scan and extract surface features over time and perform special analysis to display trends and changes to deduce the incurring effects on the land. This module also contains predictive algorithms which plays a key role in the action plans to be developed by the land users.

A study was conducted on a Tea plantation in Shizuoka, Japan where satellite imagery was used to monitor the growth, quality and subsequently the harvesting time of the tea leave using the Normalized Difference Vegetation Index (NDVI) distribution maps created by the ArcGIS Pro application. This became a cost-efficient solution for the tea farmers as they can monitor and evaluate their produce and boost production as well.

In another situation, Conservation actions were taken by the U.S. Department of Agriculture and Natural Resources Conservation Service as a sustainable development initiative using location intelligence data. As a result, the soil quality, and nutrients as well as the quantity of soil water and grounder water of the area which used to be a cropland improved in quality.

The implementation of GIS as a tool for achieving sustainable agricultural development is immense yet, untapped in many societies especially in developing countries. As Technology continues to evolve, the application of GIS in different aspects of human life changes. Geospatial Solutions are playing a major role in the agricultural sector, creating a more sustainable industry, and aiding in the progressive actions to achieve the goals set for the future generation.



# LEVERAGING LOCATION INTELLIGENCE IN THE OIL AND GAS INDUSTRY

Many companies have embraced Digital Transformation in their decision-making processes today as smart technology and connected systems continue to prove how efficient they can be in everyday business operations. The Oil and Gas (O&G) industry is no exception to this technological trend.

The impact of such embraced technologies, such as Geographic Information Systems (GIS) leads to developing operating landscape modules for business expansion while the industry continues to reap the benefits of improved productivity, higher efficiency, increased cost savings and effective monitoring. GIS encompasses systems which are able to handle location data and spatial information within the corporate office and the operational field. wThe cycle begins from data collection and subsequently, the collected data is structured and processed, managed, and analyzed within an allocated database in the system, to guide in decision making and productivity boost.

Usually, GIS systems requires regular updates with data in real time within a cloud system specially dedicated for the storage of locational data. In most, 0%G companies, locational data also tends to explore streaming— what is termed as—the Internet of Things (IoT) data on maps and dashboards, identify temporal patterns, and extract location—based intelligence using GIS Infrastructure. The Internet of Things (IoT) can be simply defined as a network of computers, comprises of devices around the world that are connected to the internet, constantly collecting and sharing data, thanks to the development of wireless network computer chips.

In addition, GIS Professionals within the O&G industry oftentimes leverage spatial – big data to gain real-time visibility into the day-to-day operations of the industry as they make efficient decisions based on increased situational awareness.

To dive deeper into the role of GIS in O&G, one needs to understand the general operational workflows within the industry. Oil field management workflows involve exploration processes such as seismic operations; specific identification of mines using coordinates, field practices such as pipeline network management which is used to transfer crude sources to refining plant and management of facilities which also holds the resources needed for operational activities.

GIS in this field, takes all the happenings on the field and replicates it in a digital way through modern visualization techniques to make better and well-informed decisions to increase performance. In furtherance of the relevance of GIS in the O&G field, it is important to note that the O&G assets data are vital to the production, sale, purchase, exchange or processing, handling, storage, transporting or marketing of related products in a firm. These factors are quantifiable in GIS as it utilizes data sensors and applications expressly developed for that purpose.

Case Study: During a petroleum user conference, Marathon Oil gave a presentation whereby they leveraged on the IoT Data Feed to explore, collect, and integrate industry related information into digital Maps and Dashboards. The company used IoT feeds to enhance operations and logistics by optimizing feeds from the online fleet of data which is processed to understand the most optimal routes to wells, as they calculated the minimum distance to be covered before reaching the desired location, using ArcGIS. This help to reduce over 20% on their operational cost.

The above illustrations on GIS use in the O&G industry keep endeavouring to reduce costs of operation, improve performance, and reduce the risk levels of operation. The introduction of location intelligence systems has proved to be the answer as GIS systems are able to enable users to efficiently manage oil production processes and assess the environment or field of operations. This has significantly improved the flexibility of work within the O&G industry and seamless workflows tend to influence oil exploration plans, projects, and initiatives.

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CSR ACTIVITIES

CSR ACTIVITIES

# TRIMBLE CATALYST GNSS PRESENTATION TO RS/GIS LAB — UNIVERSITY OF GHANA

As part of the world GIS Day 2020 celebration, Sambus Geospatial donated a Trimble Catalyst GNSS to the Remote Sensing and Geographic information Systems (RS/GIS) Lab under the Geography Department of University of Ghana, as a way of improving the quality of practical GIS being taught in the Department. This activity took place on the Tuesday 17th of November 2020.

The Trimble Catalyst is a digital Antenna that allows high quality GNSS signals and satellite corrections to be passed to the Catalyst app running on Android smartphone or tablet. The meeting was moderated by Prof. Alex Owusu Barimah, a Senior Lecturer from the Department. Amidst this event, was the head of the geography department, other supporting senior lecturers, teaching assistants and students from the department. Forging ahead, the device was presented by the head of business development of Sambus Geospatial to head of Geography Department, Prof Martin Oteng Ababio. The intended purpose of the digital Antenna is to improve the data collection exercises GIS students would be undertaking. To sum up, the meeting was concluded with a vote of thanks from Prof. Alex Owusu Barimah.













# RENOVATION OF THE GEOGRAPHICAL GARDEN

Sambus Geospatial Limited (Nigeria) also engaged in a renovation project, where the Geographical Garden of Model Secondary School in Maitama-Abuja was refurbished as part of its corporate social responsibility. The Geographical Garden is enclosed space, with concrete sculptures of different types relief and drainage features of the earth surface.

This facility was disserted due to poor maintenance however, in recognizing the essence of the geographical garden for practical lessons, Sambus revamped the project, to make it useful for all Geography Students in the School.

Further discussions were held on how to integrate GIS studies in the academic curriculum of the students, yet to be finalized. This Project was completed on the within the GIS Week hence was part of the World GIS Day celebration. This renovation began on the 11th of November 2019 and was completed within 2 weeks of its commencement.



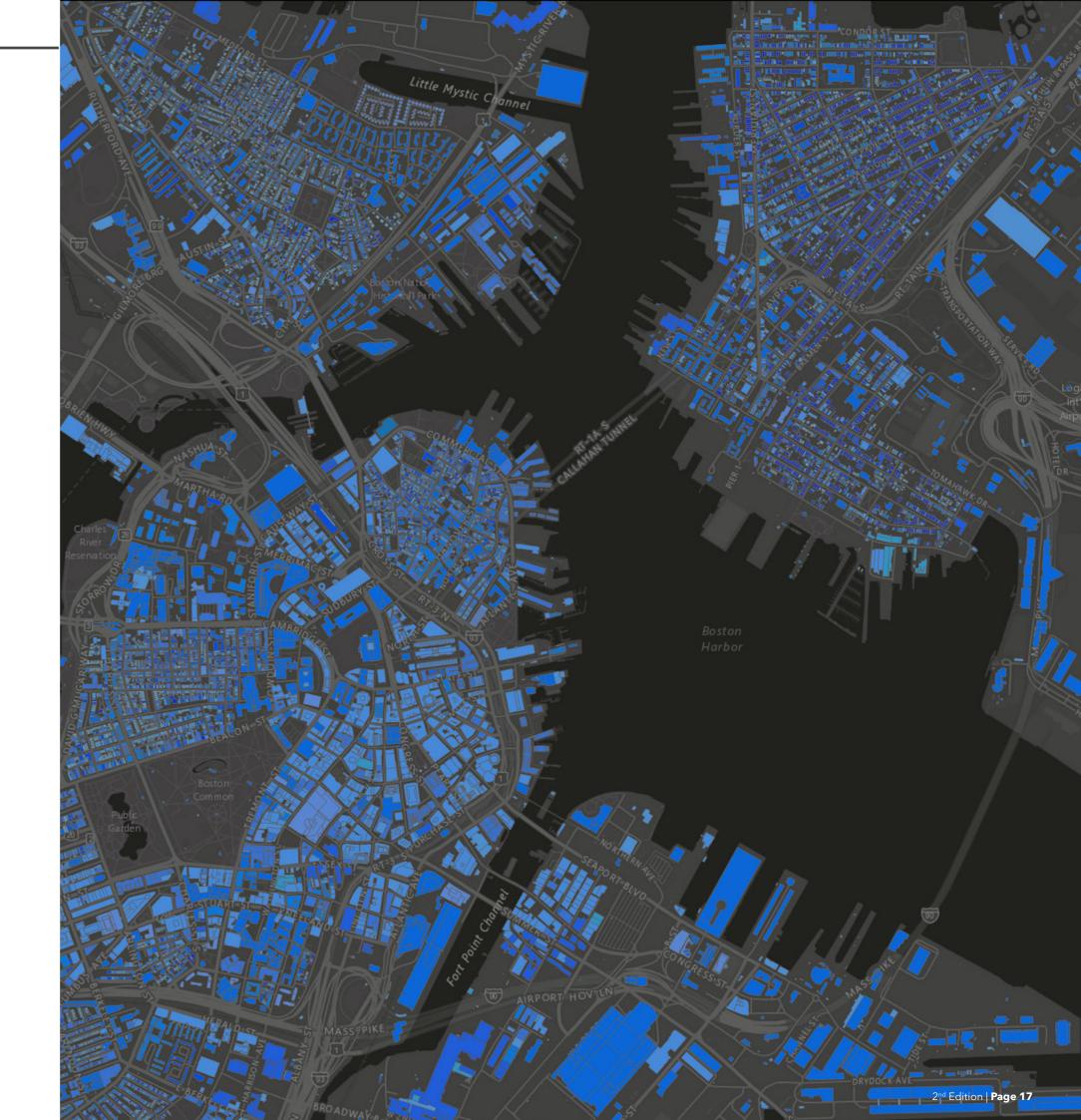






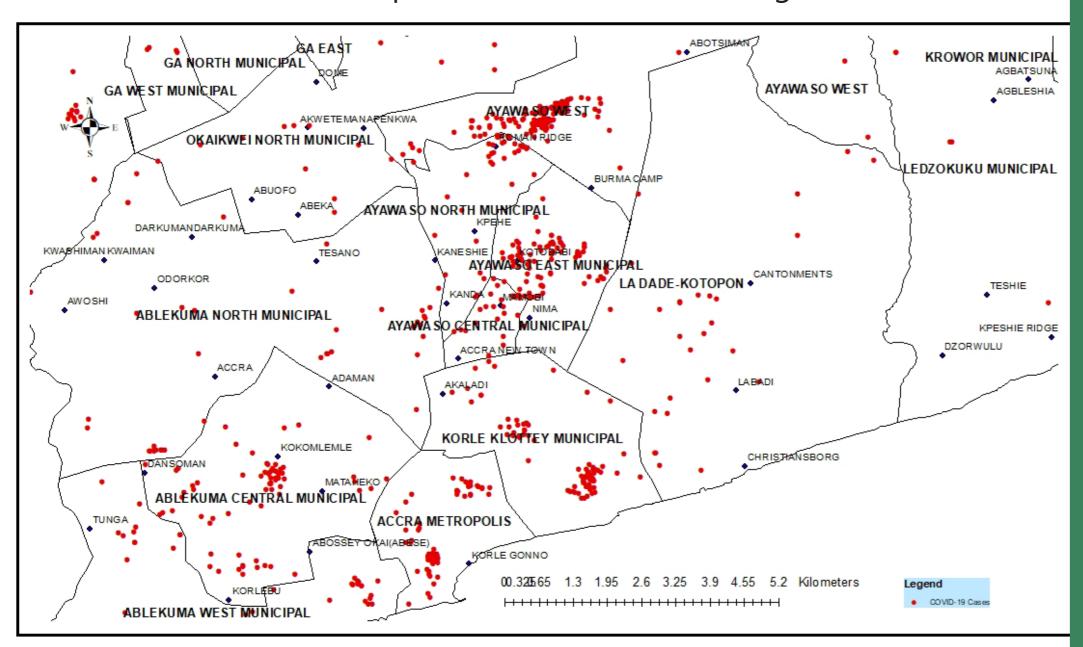
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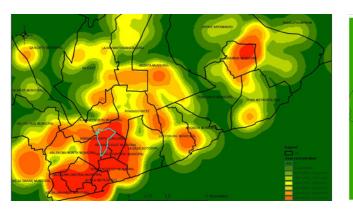
# MAP GALLERY

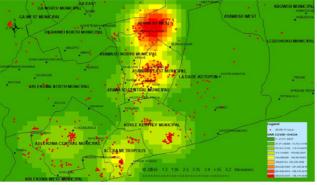


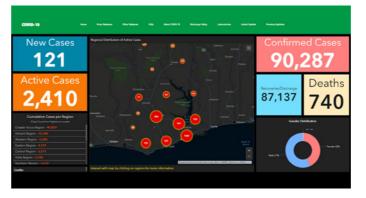
SEE THE BEST MAPS DEVELOPED BY
GIS PROFESSIONALS IN VARIOUS INDUSTRIES

# Map of recorded Covid-19 cases in selected municipalities of Greater Accra Region.









Map indicating High and Low Risk areas

Map indicating potential outbreak zones

GHS Covid-19 Dashboard

# **HEALTH**

# MONITORING COVID-19 IN ACCRA (GA) - GHANA

Following the outbreak of Covid-19 in the Greater Accra region of Ghana, the Ghana Health Service sought to develop a strategy that would help in the planning and implementation of intervention measures to curb the outbreak. One of the key ways they sought to do this, was by leveraging the power of GIS technology through spatial analysis. The above maps were developed by recording the coordinates of the residences of patients diagnosed with covid-19 during contact tracing efforts, and representing that data as points over an existing layer of municipal boundaries (Map 1). These maps provided insight into the distribution and spread of recorded covid-19 cases, thus helping GHS identify areas of high and potential risk and then subsequently recommend a suitable course of preventive action.

Further spatial analysis was conducted on the data from map 1 to derive further insights; Kernel Density Estimation was performed to classify the cases based on their relative proximities. This analysis helped visualize the data collected in a graphical way that indicated the concentration of cases across various municipalities as displayed in Map 2. When recorded over time, this provided further awareness on how cases were spreading, and thus preventive measures could be deployed by forecasting the spread as shown in map 3.

For the purposes of tracking, forecasting and public accountability relative to Covid-19, Ghana Health service deployed an ArcGIS dashboard on their website powered by ArcGIS online and Survey123. This dashboard provides further information on each recorded case; information such as gender distribution, number of recoveries and deaths are displayed.

### **Contact**

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# Software

Software: ArcGIS Pro 2.5

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# NGO's

# PROPCOM MAI-KARFI UK FOREIGN AND COMMONWEALTH DEVELOPMENT OFFICE (FCDO) FUNDED PROJECT IN NIGERIA

Propcom Mai-karfi is a rural and agricultural markets development programme funded by the UK government. Our goal is to increase incomes for the rural poor by reviving and facilitating access to agricultural and rural markets in nine states in Northern Nigeria; Adamawa, Borno, Gombe, Jiagawa, Bauchi, Kaduna, Kano, Taraba and Yobe state.

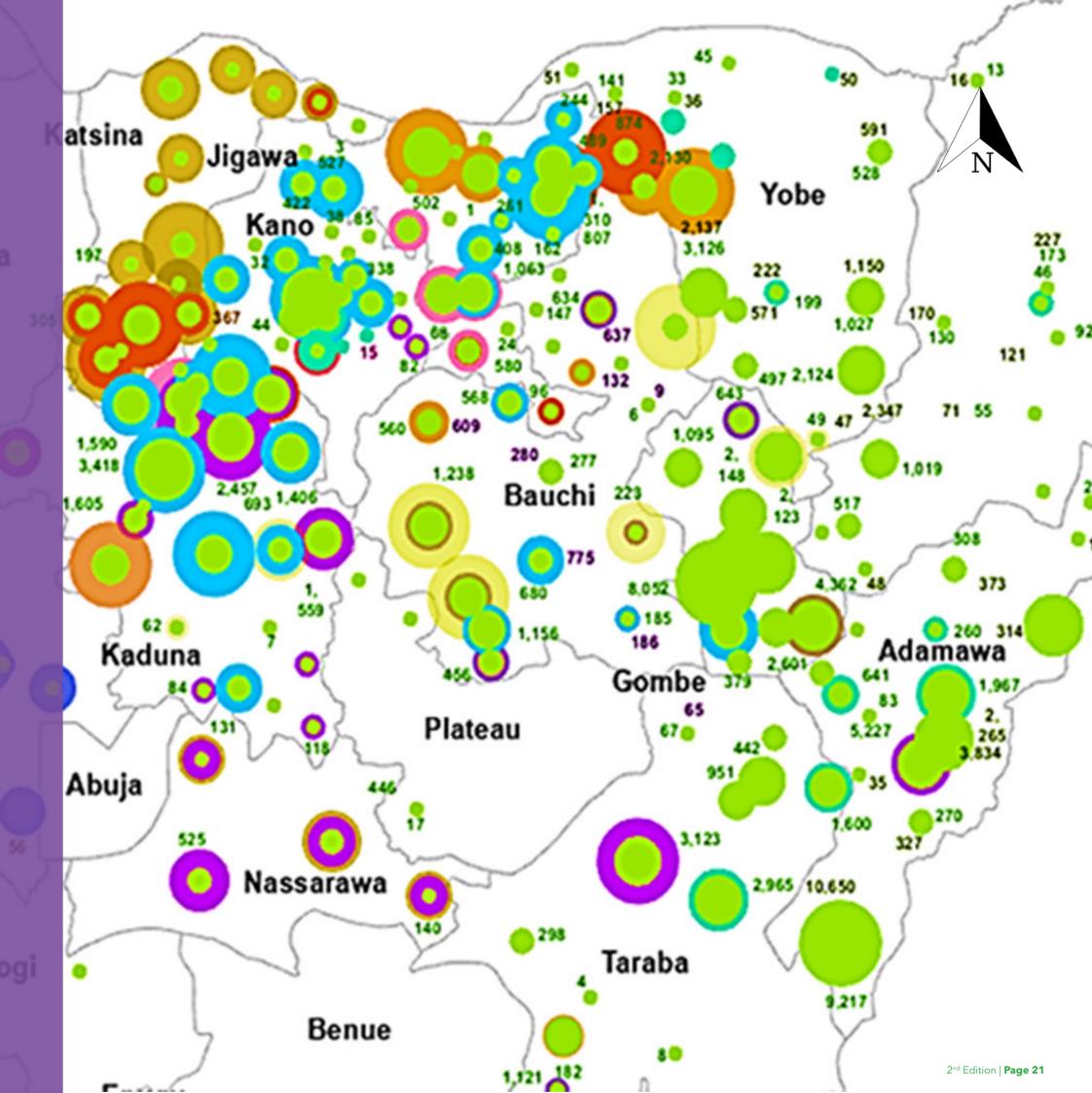
Data about location, or 'geospatial' data, is the record of what we do, and where we do it. It underpins a modern digital society and offers substantial opportunities for Propcom Mai-karfi. The need for a location-based decision tool to support the program has been emphasised from the legacy phase of the program. In 2018 GIS played an essential role in verifying the beneficiaries of the tractor mechanisation intervention across the nine program states, GIS was also used in mapping all the program activities and intervention areas. Propcom Mai-karfi as an innovative program in 2019 needed to spatially evaluate and catalogue vegetation types to understand their characteristics and importance to agroforestry and economic trees development in Yobe state then adopted GIS techniques to conduct the research. The findings from the research were insightful and provided the foundation for setting up the PM agroforestry intervention, climate smart agriculture (CSA) initiatives and other enviormantal markets

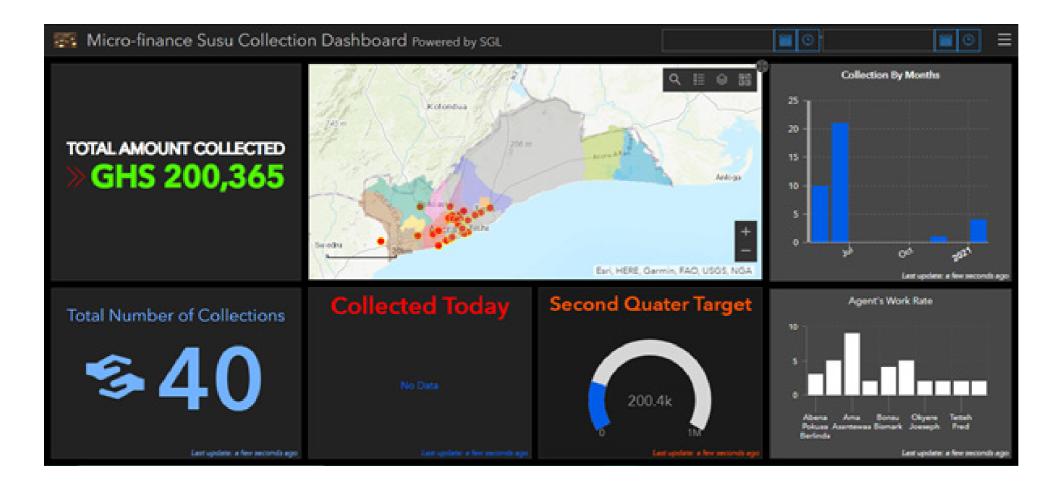
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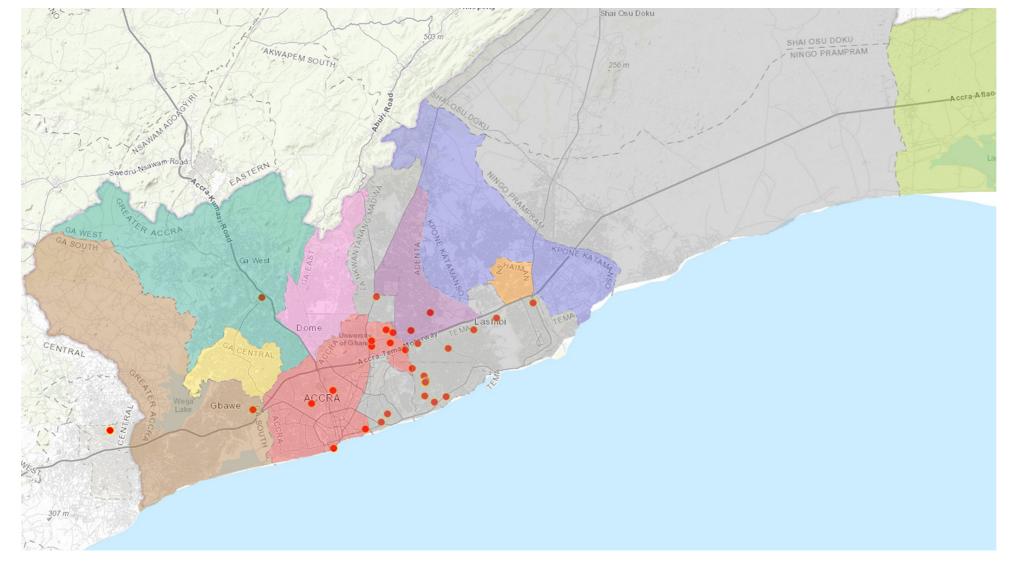
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# Software

Software: ArcGIS Desktop







# **FINANCE**

# THE MICRO-FINANCE DASHBOARD

This interactive dashboard mimics how a Microfinance Organization would monitor its operations and field agents in real time.

This monitoring system makes use of the Survey123 application which provides the registration form. Once submitted the data is linked to the dashboard and is displayed in near real time.

In the absence of network connection, which is a likelihood in some areas, the offline functionality allows for field agents to save some entries and submit later once they have internet access.

The Dashboard displays some useful information to its audience and can be customized to suit your preference. The data you would want to display on the dashboard is dependent on the data you are collecting. This means you would have to consider your survey configuration.

From the Dashboard the collected data has been visualized for the audience's consumption; total amount collected, daily submissions, total number of registrants, quarterly targets, monthly records, and field agent records. The map interface provides spatial information as to where the various registrations took place. The top right part of the dashboard displays a date filter where you can look up specific date periods. Clicking on the bar graphs of the field agent records also filters the agent's points of registration as well as total number of registrations.

This Dashboard is useful for Organizations that have similar operations such as banks, insurance companies, and for general data collection and monitoring activities.

# Contact

SAMBUS GEOSPATIAL info@sambusgeospatial.com

# Software

Software: ArcGIS Pro 2.5

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# PHYSICAL PLANNING

# SPATIAL ANALYSIS OF LAND USE/ LAND COVER OF ETSAKO WEST LGA OF EDO STATE NIGERIA

Several factors should be considered for an image classification process to be successful, these includethe availability of high-resolution satellite imagery and secondary data, a precise classification process, and the user's experience and expertise with the procedures. The goal of this study was to use remote sensing and GIS techniques to classify and map land-use/land-cover in the study area.

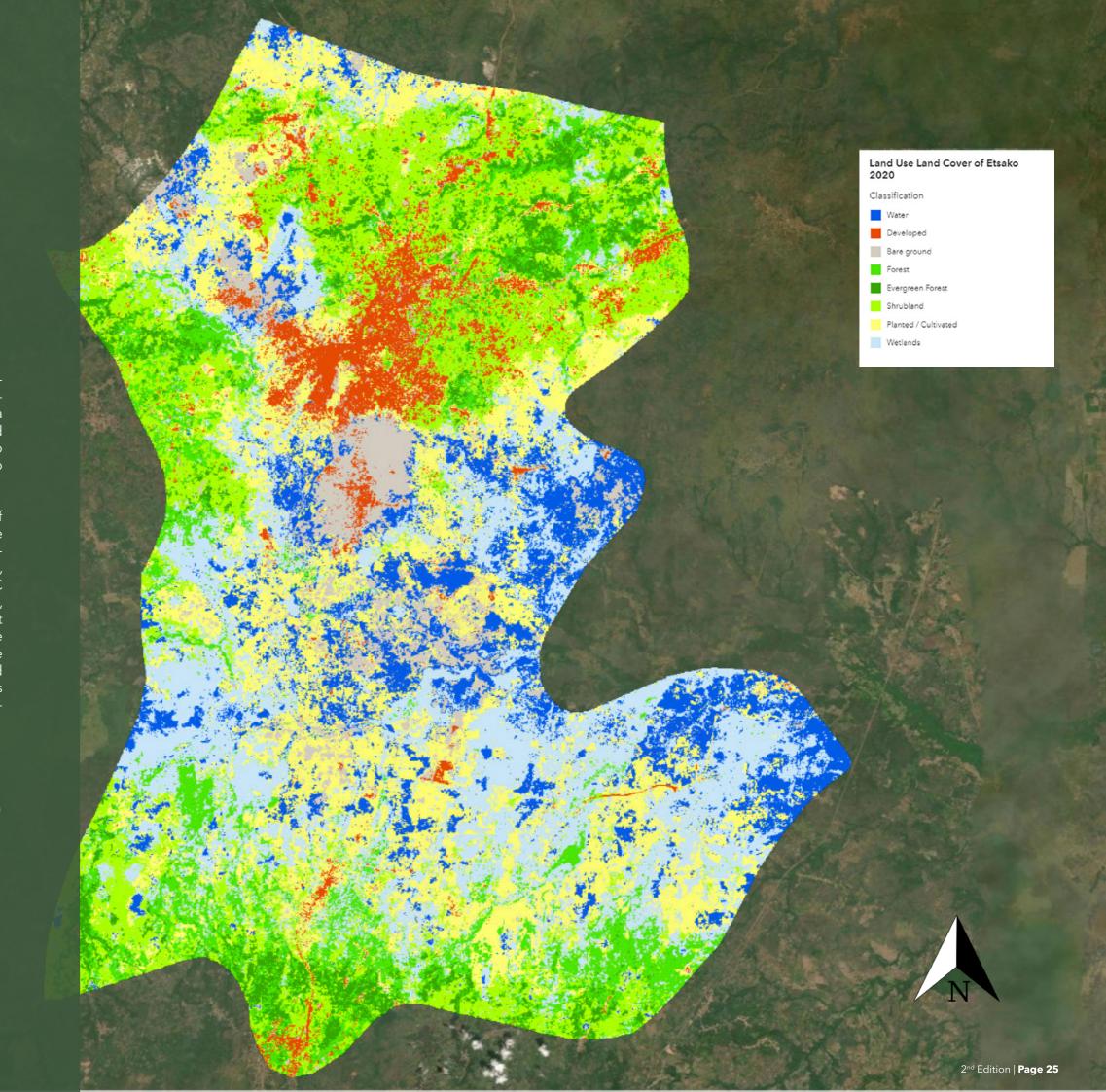
This study is divided into two sections: (1) classification of land-use/landcover (LULC) and (2) accuracy assessment. The Non-Parametric Rule was used to perform supervised classification in this study. Wetlands (23 %), water bodies (11 %), and developed areas (5 %) were the most common LULC types, followed by evergreen forest (5 %), shrublands (18 %), and barren land (6 %), Cultivated/planted (22 %), and Forest (22 percent) (10 %). The overall classification accuracy of the study was 81.7 %, with a kappa coefficient (K) of 0.722. The kappa coefficient is significant, indicating that the classified image is suitable for further investigation. This study presents an essential source of information whereby planners and decision-makers can use to sustainably plan the environment.

# **Software**

ArcGIS Pro 2.7.2, Microsoft Office Data Source: Landsat 8 from Glovis (https://glovis.usgs.gov/) Nigeria administrative boundaries from OSGOF

# Contact

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UPCOMING EVENTS
THE EDITORIAL TEAM

# **UPCOMING EVENTS**

Participate in a series of geographic information system (GIS) events as you discovering new insights in various immersive learning programmes to learn more about the latest geospatial technology. See all upcoming events and make a date with us.

April 06 - 08, 2021

Esri Developer Summit - Virtual

Organized to help you learn how to build cutting-edge apps using advanced mapping technology

Register - esri.com/en-us/about/events/devsummit/

April 20 - 21, 2021 GIS for a Sustainable World Conference

Virtual event Cohosted by the United Nations Institute for Training and Research (UNITAR)
-United Nations Operational Satellite Applications Programme (UNOSAT) and Esri.

Register - esri.com/en-us/about/events/gis-sustainable-world/

July 12 - 15, 2021 Esri User Conference

Organized to help you learn to use the latest ArcGIS tools in and Applications in different industries.

Register - esri.com/en-us/about/events/uc/

November 17, 2021

World GIS Day

Celebrating the initiation of GIS by Spatial Analytics World Leader, Esri

April - December, 2021 Sambus Geoworld

An educational initiative developed by Sambus Geospatial to Improve GI knowledge and Awareness.





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