



# DIGITALIZATION OF LAND ADMINISTRATION IN GHANA

TRANSFORMING LANDS COMMISSION

**Presentation by:** 

**BEN ARTHUR** 

DEPUTY EXECUTIVE SECRETARY, LANDS COMMISSION



"To provide high quality, reliable and efficient services in geographic information, guaranteed tenure, property valuation, surveying and mapping through teamwork and modern technology to our stakeholders"

#### **VISION**

"To become a Center of Excellence for Land Services Delivery"

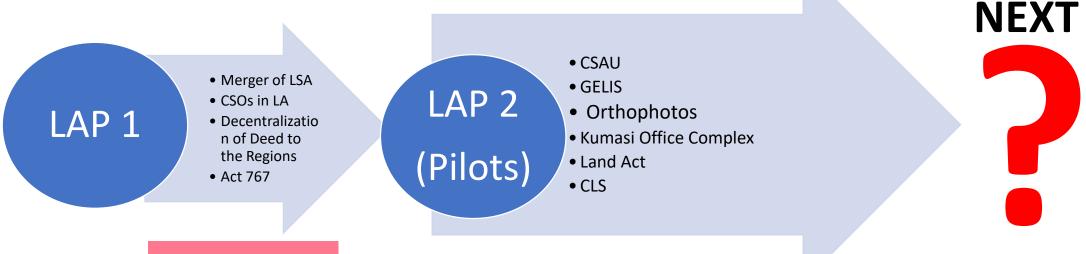
#### **GOAL**

"Customer satisfaction is our goal"

## Our target

•"To efficiently maintain up-to-date land records, provide reliable land information, equitably and effectively deliver land administration services to improve tenure security & unlock DEAD CAPITAL in land, in order to increase the contribution of land to socio-economic development for the BENEFIT OF THE GHANAIAN PEOPLE and the country."

## BRIEF BACKGROUND OF INTERVENTIONS





## **MARKET SOUNDING - 2018**

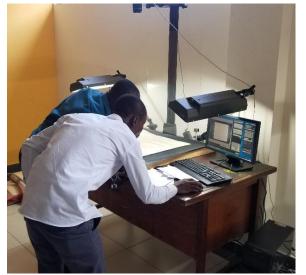
Wholistic Transformation agenda anchored on the successes and gaps identified from previous interventions

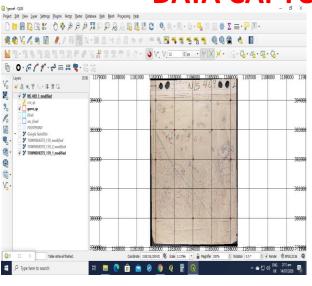
# "It is unacceptable that some sections if the country's land administration were still in a manual environment in the age of technology"

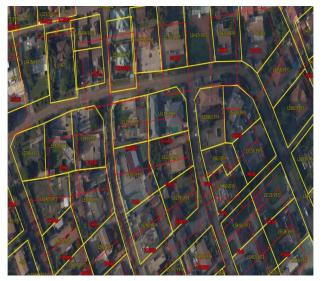
HIS EXCELLENCY NANA ADDO DANKWA AKUFO-ADDO PRESIDENT OF REPUBLIC OF GHANA

## **EFFORTS SO FAR**

#### **DATA CAPTURE & CONVERSION**





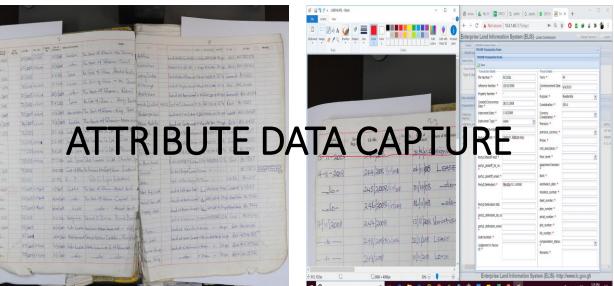




**Scanning** 

**Geo-referencing** 

**Digitizing & Integrating** 



**Archiving** 





## FILE MANAGEMENT & ARCHIVING









## DIGITALIZED BUSINESS PROCESS

GELIS

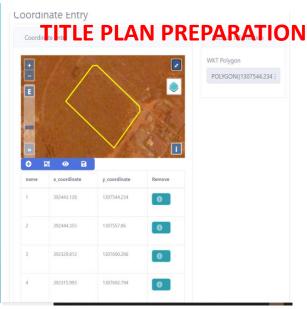
ELIS (IN-HOUSE)

- Case Management system
- Digital records information/ consolidated searches
- Performance Monitoring & Management (Delivery & Compliance Dashboard)
- Data Analysis and Reporting
- Online Services & Tracking for selected applications
- Online payment through Ghana.gov platform

#### PILOT DIGITALIZED BUSINESS PROCESSES









#### **ELIS SUPPORTED SERVICES**



Searches Stamping

Concurrence

&

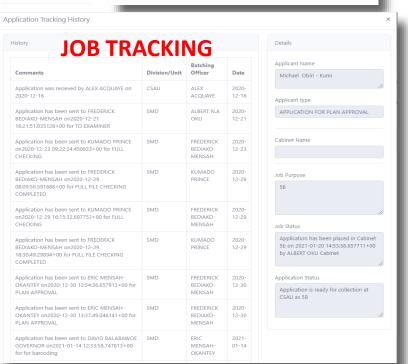
Consent

- Assign
- Sublet
- Mortgage

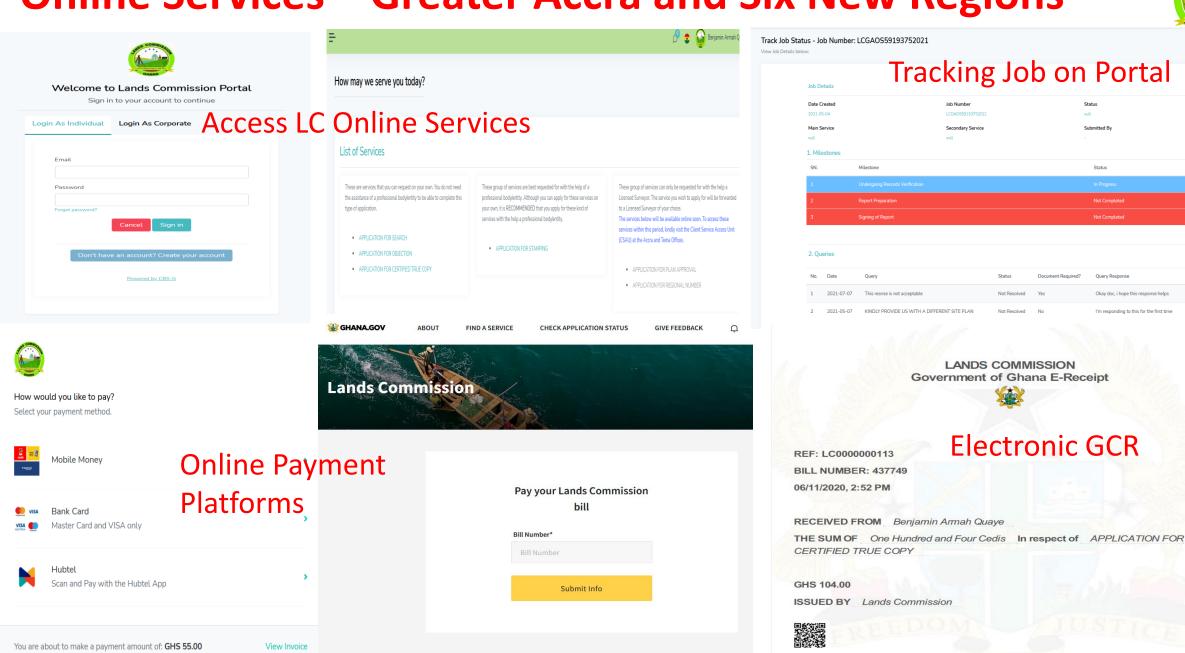
#### Title Registrati on

- (First Registration,
- Transfer (Whole or Part),
- Object

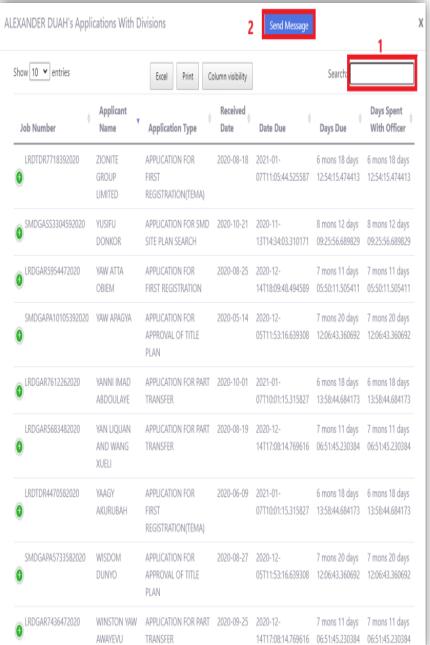
Deeds Registrati on

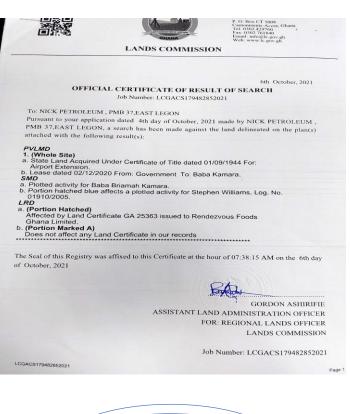


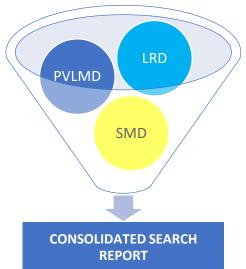
## Online Services – Greater Accra and Six New Regions









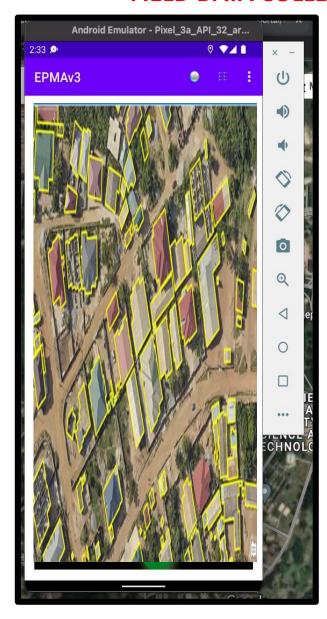


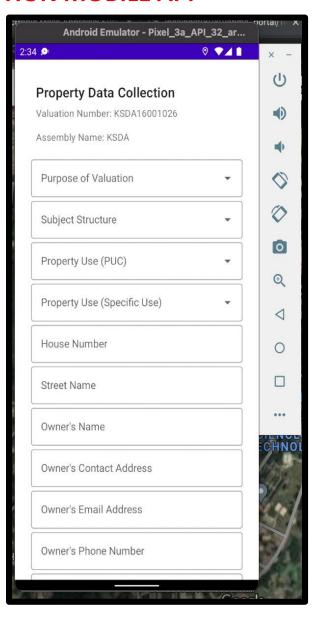
#### **SOP & TECHNICAL OPERATIONAL MANUAL**

#### **DELIVERY & COMPLIANCE DASHBOARD**

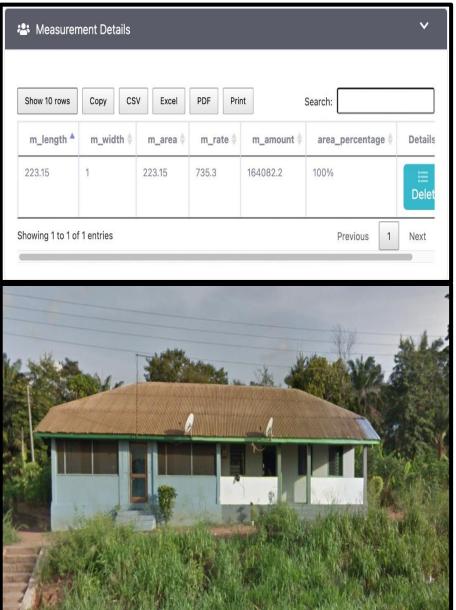
#### DIGITAL PROPERTY MASS VALUATION

#### FIELD DATA COLLECTION MOBILE APP





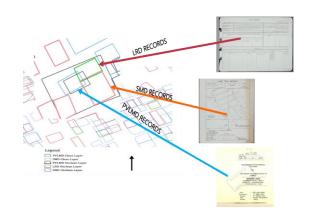
#### **QUALITY ASSURANCE**



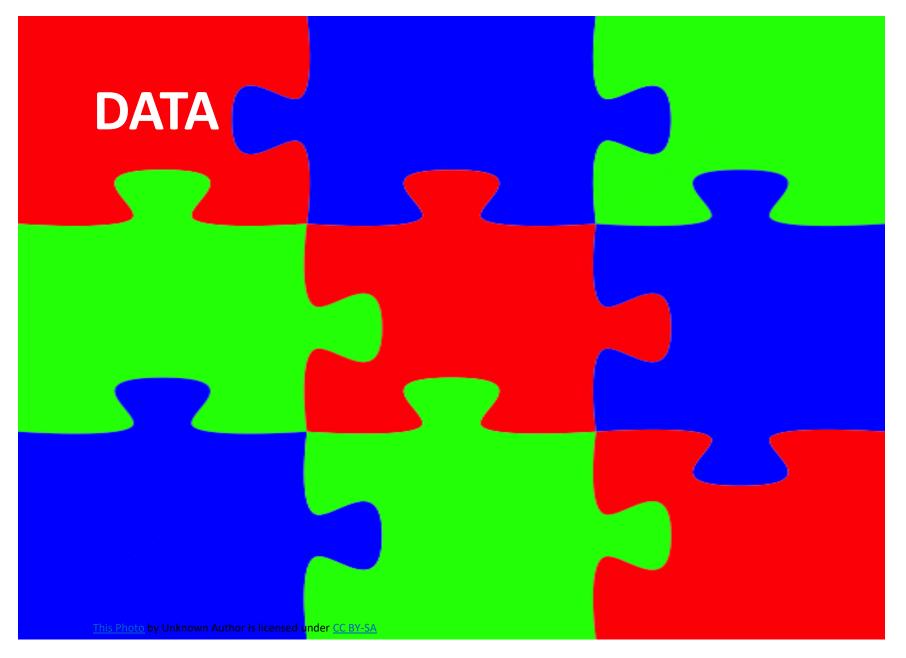
## GAPS/CHALLENGES & KEY CONSIDERATIONS

Overlaps in spatial data across Divisions

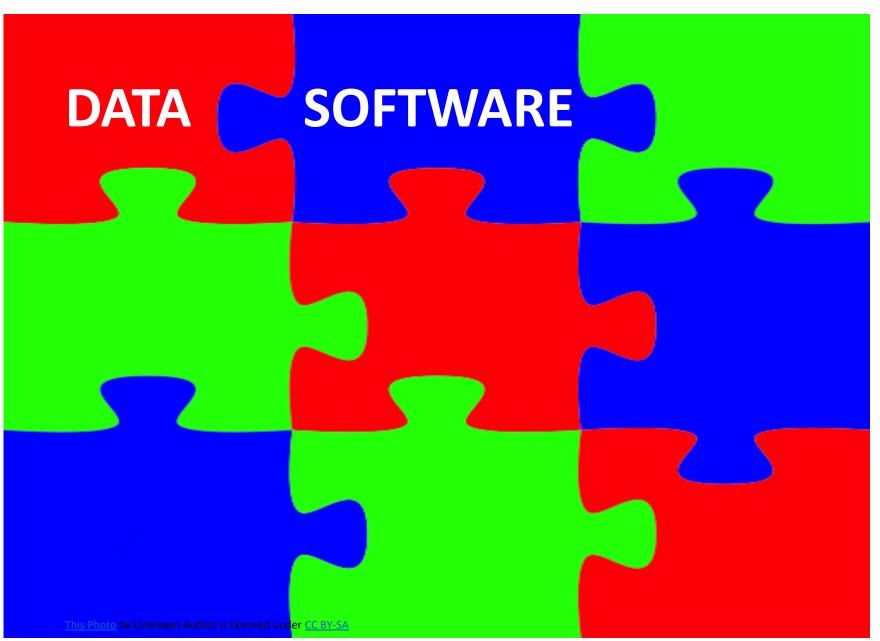




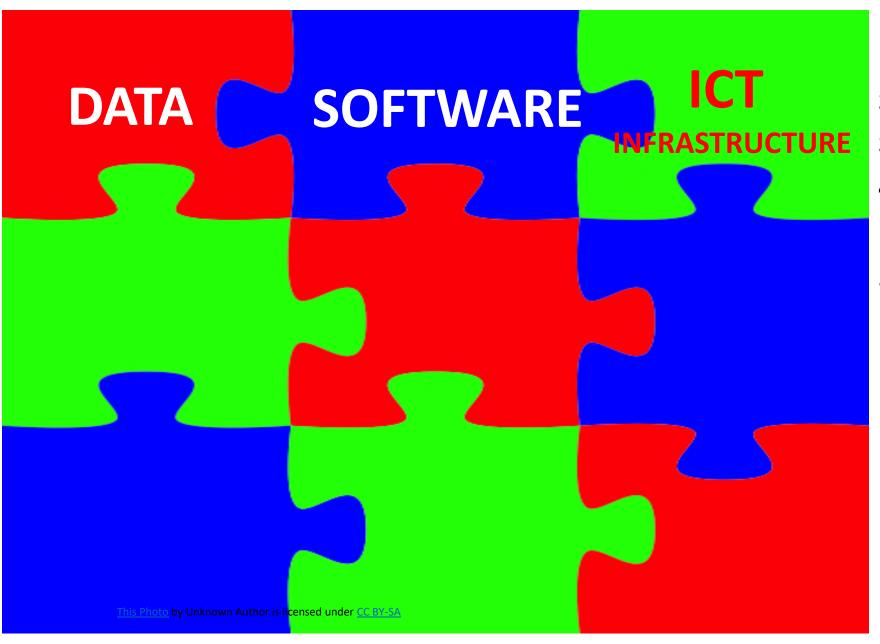
- Limited digitization coverage & data gabs manual and digital working side-by-side
- Generation of Final output from data captured during processes
- IT infrastructure limitations Data Centre, Network infrastructure,
- Inadequate HR Capacity (In-house software team)
- Office layout and poor working environment



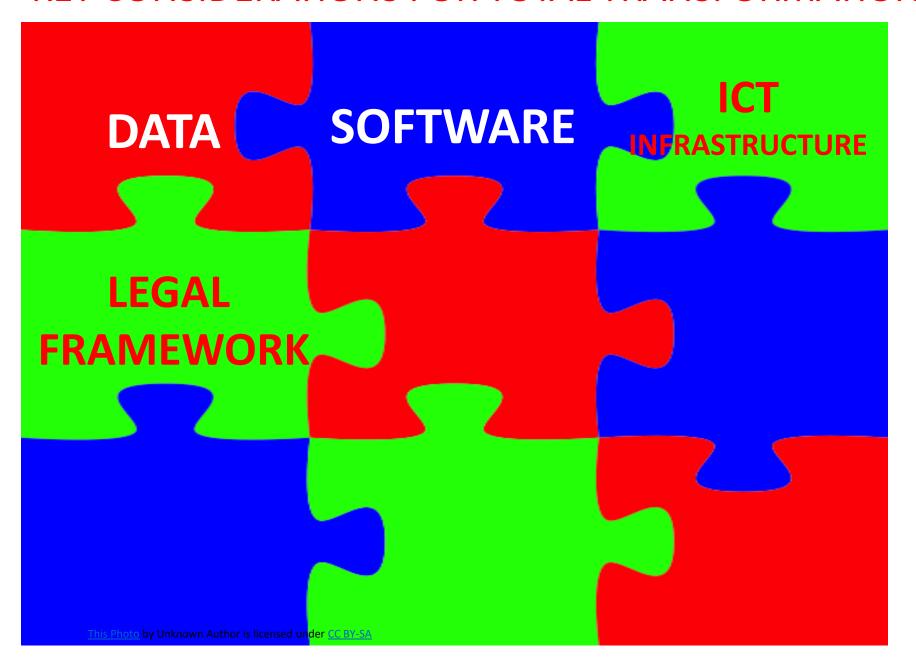
- L. DIGITAL BASE MAPS
  WITH LIDAR
- 2. SURVEY DATA (CORS & GRN)
- 3. FIT-FOR-PURPOSE SURVEYING TECHNIQUES
- 4. DIGITAL DATA (MANUAL TO DIGITAL DATA)
- 5. SYSTEMATIC
  RECONCILIATION OF LC
  RECORDS WITH
  GROUND SITUATION
- 4. DATA CREDIBILITY



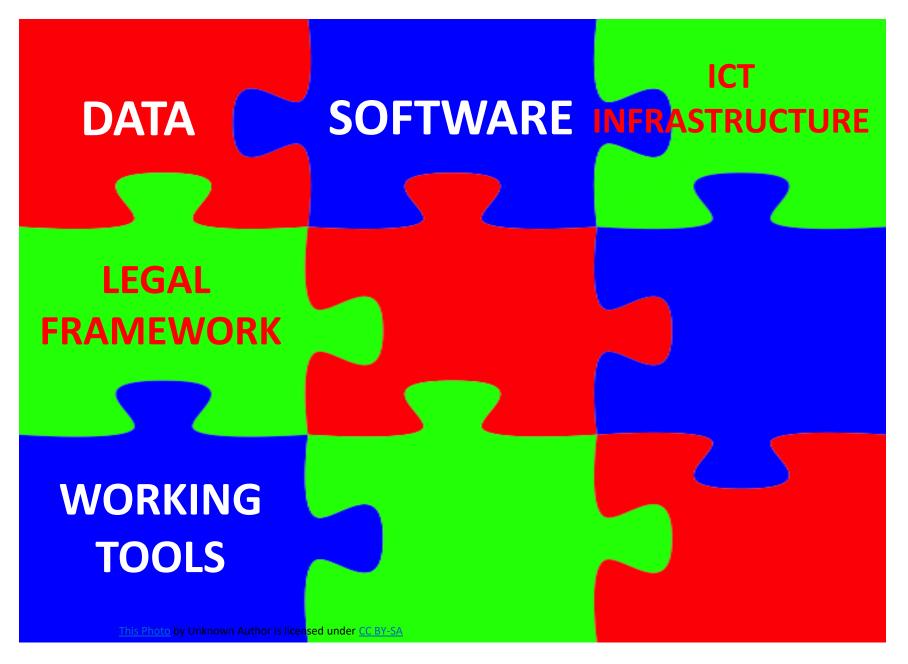
- 1. LIS UPGRADE OF GELIS/ELIS
  (COVERAGE & ADDITIONAL FUNCTIONALITIES)
- 2. BUSINESS PROCESS (REENGINEERING) & AUTOMATION
- 3. EFFICIENCT DATA
  CAPTURE,
  RETRIEVAL AND USE
  IN GENERATING
  FINAL OUTPUTS
- 4. STATISTICS AND REPORTS



- 1. RELIABLE SERVICE AVAILABILITY
- 2. NETWORK INFRASTRUCTURE
- 3. DATA SECURITY
- 4. HARDWARE (SERVERS, STORAGE, POWER ETC)
- 5. CLOUD COMPUTING, DR SITE, BACKUP SITE

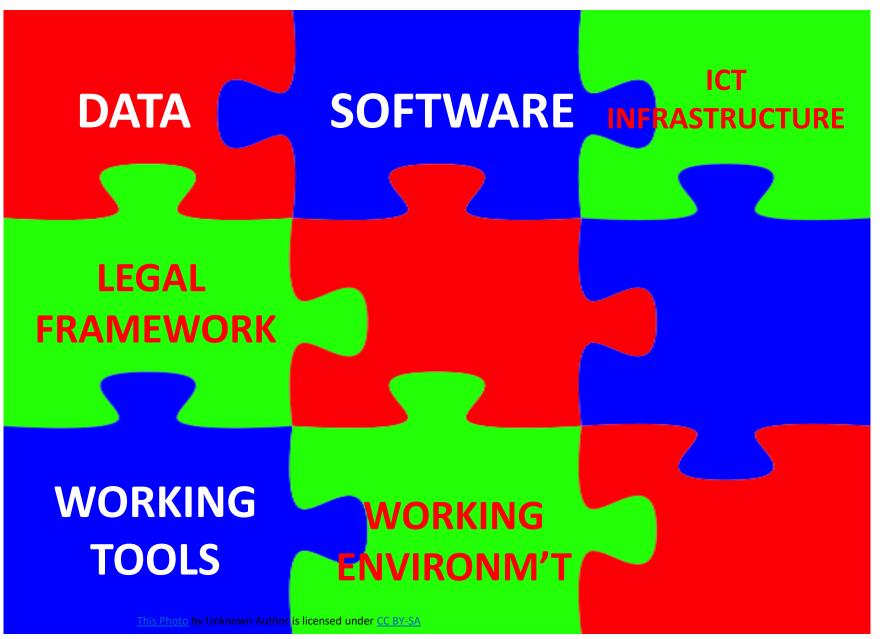


- 1. REVIEW OF EXISTING LEGAL FRAMEWORK
- 2. WORKING WITHIN
  LEGAL FRAMEWORK –
  (LAND ACT)
- 1. LIS TO
  OPERATIONALIZE LC
  AND LAND ACT
- 2. JUDICIARY DATA SHARING & TRAINING

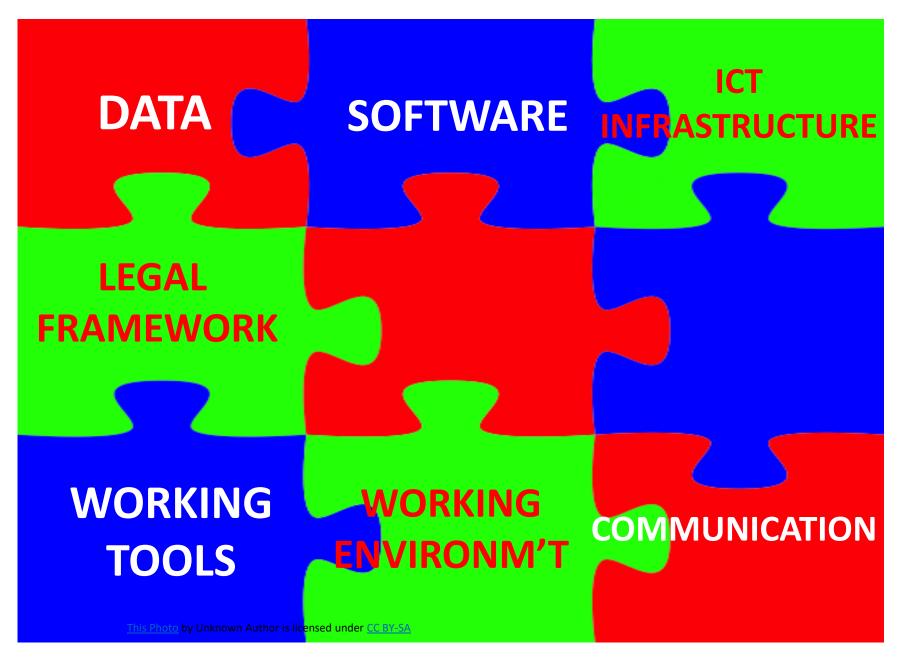


1. COMPREHENSIVE TOOLING & RETOOLING LC

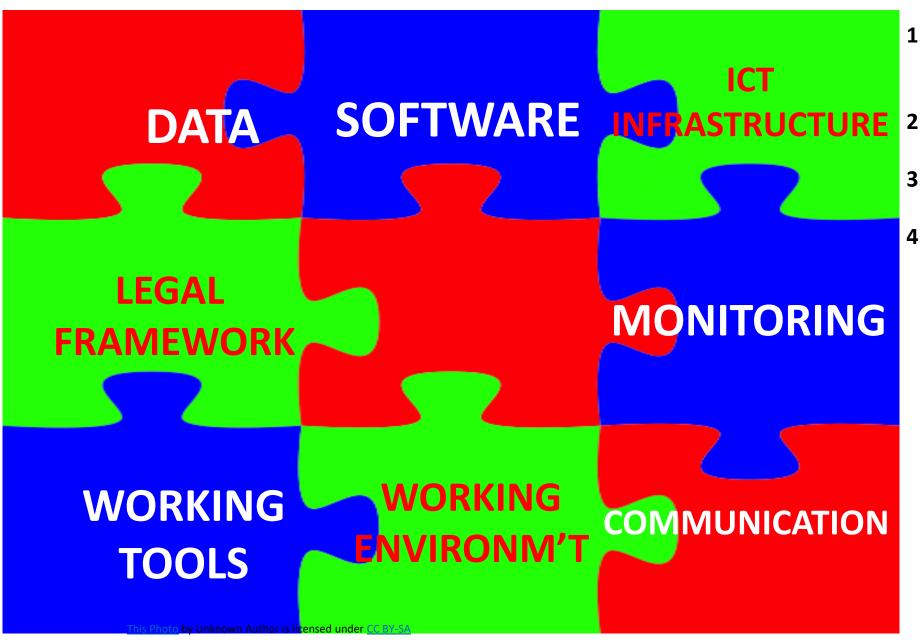
VEHICLES, COMPUTERS, ASSESSORIES, PRINTERS SCANNERS, SURVEY, EQUIPMENT ETC.



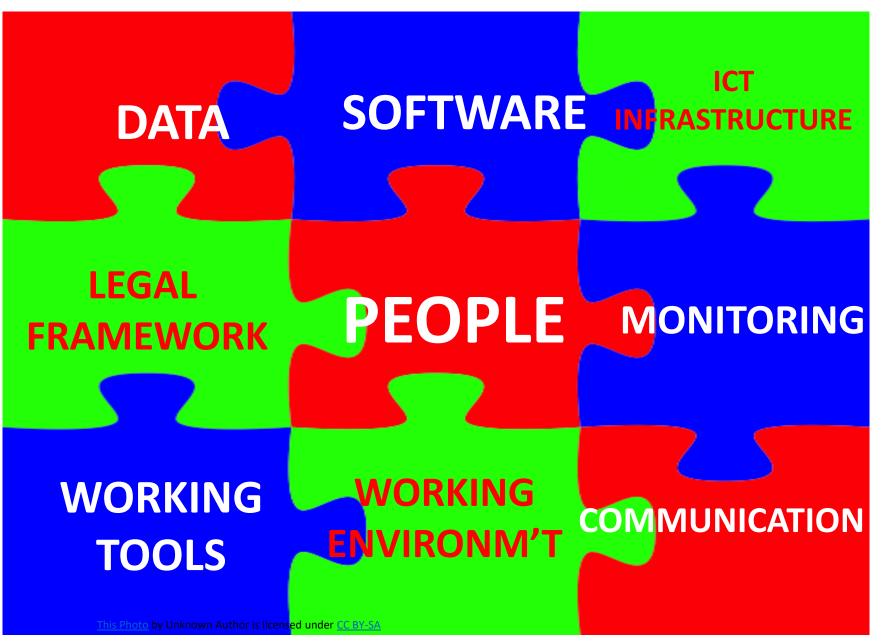
- 1. PHYSICAL INFRASTRUCTURE.
- 2. DECENTRALIZED OFFICES
- 3. 13 MODEL REGIONAL OFFICES
- 4. 10 MODEL SATELLITE CSAUS
- **5. LC STAFF TRAINING CENTRE**



- 1. INTERNAL
- 2. EXTERNAL
- 3. STAKEHOLDERS (CORPORATE/PROFESSIONAL)
- 4. PORTALS & DIGITAL ACCESS
  TO LAND SERVICE DELIVERY
  INFORMATION

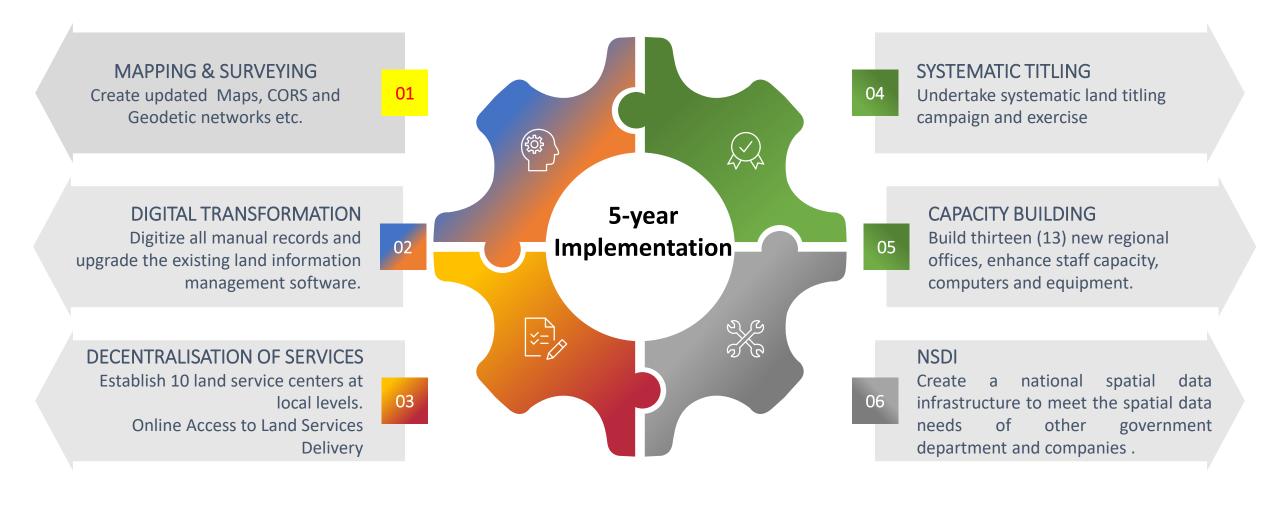


- 1. REVIEW OF SOP & OPERATING MANUALS
- 2. COMPLIANCE STANDARDS
- 3. DELIVERY TARGETS
- 4. WORK CULTURE CHANGE



- 1. RATIONALIZATION,
  RE-ALLIGHNMENT &
  INTEGRATION
- 2. CAPACITY BUILDING
- 3. RETRAINING
- 4. MOTIVATION /
  CONDITIONS OF SERVICE &
  REWARD SYSTEMS (IGF)
- 5. CHANGE MANAGEMENT

## PROJECT COMPONENTS



## **IMPROVED MAPS AND SPATIAL DATA**

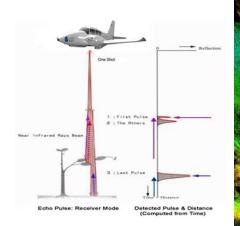
National Digital Base Maps

**Line Maps 1:2500** 





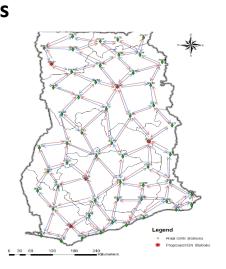
High Resolution (10Cm/4pnt.)



4pnt.) Lidar Products



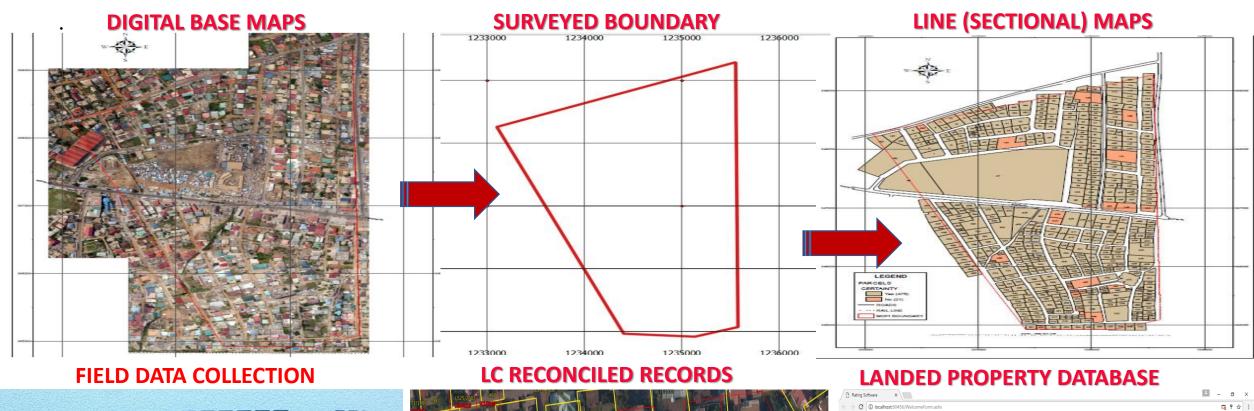
IMPROVED MAPS AND SPATIAL DATA



**Establishment of CORs (Nationwide)** 

**Establishment of GRN** 

#### SYSTEMATIC CREATION OF NATIONAL CADASTRE – (LUSPA, GhIS, LISAG, MMDAs, CLSs, CICOL)



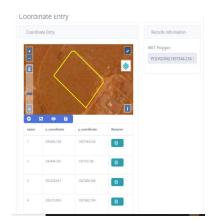


#### **DIGITAL TRANSFORMATION OF LAND SERVICES DELIVERY**

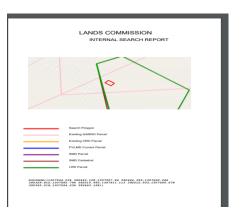
#### **DATA CAPTURE & CONVERSION OF EXISTING RECORDS**



#### **DIGITAL TRANSFORMATION – BUSINESS PROCESS AUTOMATION**



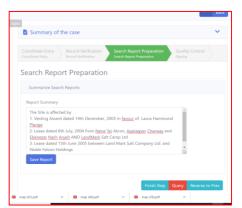
PLAND APPROVAL &
TITLE PLAN PREPARATION



ACCESS RECORDS
SEARCHES



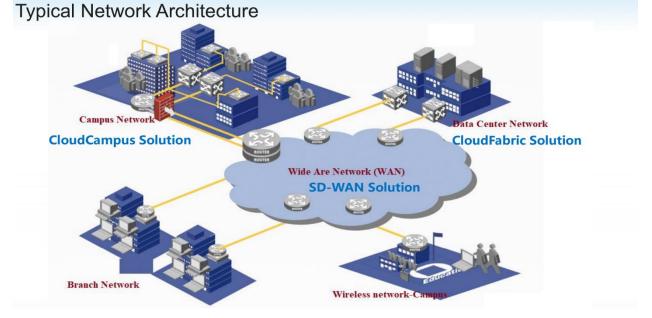
JOB ALLOCATION & TRACKING





FINAL REPORTS & OUTPUTS

Lands Commission
Accra Data Center HLD



**NETWORK INFRASTUCTURE** 

**COMBINATION OF ON-PREM & CLOUD DATA CENTRES** 

#### DCENTRALIZATION OF LAND SERVICES DELIVERY

#### IMPROVED WORKING ENVIRONMENT (CONSTRUCTION OF 13 MODEL REGIONAL OFFICES)

TAMALE
KOFORIDUA
SEKONDI
CAPE COAST
BOLGATANGA
HO
TEMA



6 NEW REGIONS
OTI
BONO EAST
NORTH EAST
SAVANNAH
WESTERN NORTH
AHAFO

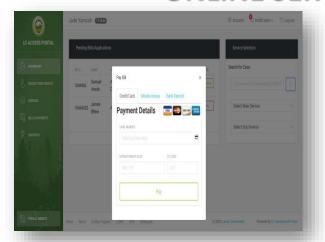


10 MODEL DISTRICT
CLIENT SERVICE
CENTRES
(DISTRICT CSAUs)

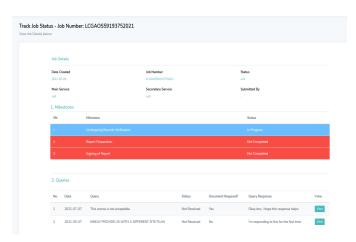
#### **MODEL REGIONAL OFFICES**

#### **ONLINE SERVICES NATIONWIDE**









ION PAYMENTS –GHANA.GOV

**E-GCR RECIEPTS (CAGD)** 

TRACKING OF APPLICATION

#### **CAPACITY DEVELOPMENT & IMPROVED WORK CULTURE**

#### STAFF RATIONALIZATION, RETRAINING AND REDISTRIBUTION – CHANGE MANAGEMENT

**CONTINUOUS TRAINING AND CAPACITY DEVELOPMENT** 

**COMMUNICATION & PUBLIC ENGAGEMENTS** 

#### **RETOOLING THE LANDS COMMISSION**

- COMPUTERS AND ACCESSORIES, PRINTERS ETC
- SCANNERS
- OPERATIONAL VEHICLES
- FURNITURE
- SURVEY EQUIPMENT









## WHERE ARE WE?

ALL TECHNICAL PROCESSES COMPLETED

FINANCING MODEL UNDER DISCUSSION WITH MoF

• DRAFT LEGAL AGREEMENT CONCLUDED WITH ATTORNEY GENERAL'S OFFICE

PROJECT EXPECTED TO COMMENCE IN 2023

# **CONCLUSION**Key Expected Outcomes

- Introduce innovative fit-for-purpose technologies for survey to reduce time and cost of surveys
- Possibility of conducting searches with "plot numbers" as well as plans extracted from layouts, etc
- Opportunity for conducting instant searches online
- Provide reliable and updated digital map data for use by ALL Map once and Use by ALL
- Establish and share credible and reliable land records with land holding groups, CLSs, LUSPA, MMDAs and the general public to improve service delivery and security of tenure
- Operate almost completely digital and Improve turnaround time for delivering all land services
- Build a land Administration Institution manned by well trained and qualified professionals
- Create a conducive working environment for staff and client of Lands Commission
- Ultimately create a new client focused Lands Commission as a "Center of Excellence for Land Services Delivery"

## THANK YOU FOR YOUR ATTENTION

## **KEY PROJECT INTERVENTION AREAS**

## **Project Components**

## 1. Improved Maps and Spatial Data

- a. Production of Digital Base Map
- b. Establishment of GRN and CORS & Transformation parameters)
- c. National Spatial Data Infrastructure (NSDI)

## 2. Digital Transformation of Lands Commission

- a. Data Conversion and Integration
- b. Business Process Reengineering & Automation
- c. Land Information System
- d. System Operation & Maintenance
- e. Augmentation of ICT Base

#### 3. Decentralization of Land Service Delivery

- a. Construction, Equipping & Establishing 10 satellite CSAUs
- b. Construction, Equipping & Establishing 13 Regional Offices
- c. Development & Management of Online Platforms Services & New Business Models
- 4. Systematic Recording/Titling, Verification and Creation of National Cadastre
  - a. Design of Strategy for creation of National Cadastre
- b. Preparation of Sectional Maps & collection of field data for National Cadastre, Property Taxation etc, in selected urban areas
- 5. Capacity Development, Improved Work Culture and Corporate Governance
  - a. Transforming Culture by Standards
  - b. Human Resource Development
  - c. Augmentation of Logistical Base (Vehicles & Equipment)
- 6. Project Management