

**STANDARDS AND QUALITY ASSURANCE;
A NEED FOR THE LAND SURVEYOR
IN IMPLEMENTING THE LAND
ADMINISTRATION PROJECT (LAP) OF GHANA**

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Introduction

- Since 1996, Ghana has gone through a number of land policy reforms aimed at reaching sustainable land management /development and MDG's objectives
- The Land Administration Project which started in 1999 and revised in 2002 is one of these new policies implemented through (15–25) years
- One of the four components of LAP is improving land titling, registration, valuation and information systems.
- The role of the Land Surveyor in the implementation of this component is vital and comes with many challenges

FIG

Survey of Ghana

- The mission statement of the Survey Department is *"To provide accurate and reliable geographic information services and standards through efficient utilization of appropriate technology for the exploitation and exploration of the natural resources of the land to alleviate poverty and support the socio-economic development of Ghana in an expeditious and cost effective manner"*
- The Survey Department contracts Licensed Surveyors to execute all survey works to meet this objective.



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FIG

Survey Standards/1

- Components of the standards
 - Professional standards
 - Production standards
 - Products standards
- Ghana Survey standards are regulated by the Survey Act 162 (Act 127) which was reviewed by the LI 1444
- These laws and regulations provide standards for survey data capture and survey data output

Survey Standards/2

- Ghana standards adopts international standards from ISO/IEC Guide 1996 which specifies
 - Technical regulations
 - Conformity assessment
 - Certification
 - registration

Role of Surveyor in meeting these Standards

- Tools used by the surveyor (hardware and software)
- Processes of the service delivery (professional ethics and practice)
- Final Product

Survey Equipment

- Every survey equipment comes with its own standard published for reference
- The standards provide choices to determine standards and accuracy requirements for final output, planning and budgeting
- Interoperability which used to be a burden for surveyors is now lessened because manufacturers are making sure their products are adaptable to other systems
- provide

Professional Practice/1

- Systems of ensuring standard in professional practice of the land surveyor in Ghana:
 - The survey law and regulation referred to supra
 - Constitution and bye-laws of the Ghana Institution of Surveyors
 - Constitution of the Licensed Surveyors Association of Ghana.

Professional Practice/2

- The survey laws mandates the Director of Surveys to prepare technical instructions for survey and mapping
- Existing technical instructions have certainly outlived its usefulness as they do not address the contemporary issues of modern day land surveying and mapping
- The difficulty in ensuring quality assurance and standards within the process and products from surveyors
- Insertion of procurement quality inserted in the quality and standards required of the service or product in the procurement document

Services and Products

- End products of survey service delivery are accurate and reliable maps and plans prepared by the surveyor
- Many products however have become questionable in the face of constant reports of inaccurate or badly prepared plans submitted to both government and private institutions
- What has contributed to these include
 - lack of standardization facilities for testing equipments
 - difficulty on the part of the clients to assess quality and completeness of maps and plans
 - lack of ethical will on the part of some professional surveyors
 - lack of will on the part of professional association and the state institution to discipline offenders because of peer protection

FIG Challenges of the Survey Standards in Technological changes /1

- Approximately (1) Land Surveyor : 100,000 citizens of Ghana, clearly shows large volume of work is expected of a surveyor
- Such environment produces many illegal "quack" surveyors
- Lack of legal of legal backing in checking survey standards
- Lack of GPS baseline permanent reference stations to check GPS surveys



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FIG Challenges of the Survey Standards in Technological changes /2

- Enforcement of survey standards set by FIG
 - ISO 17123-3 - Optics and optical instruments – field procedures for testing geodetic and survey instruments - theodolites
 - ISO 19111 - Geographic information - spatial referencing by coordinates
 -
- Capturing appropriate and desirable geographic data sets, management and utilization of spatial data amongst and between all the land sector agencies
- Building adequate capacity for surveying and mapping through training workshops



FIG Capacity Building and Training





- ☐ Define clear roles and functions
- ☐ Promote standards in Technological changes
- ☐ Support for skills training and other capacity-building initiatives
- ☐ Promote inter-institutional and Customary cooperation

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FIG Challenges of the Survey Standards in Technological changes /3

The main institutions responsible for land administration in Ghana, The Customary Authorities (comprising a chief or head of family and his principal elders) and The Public Sector Institutions (**The Lands Commission, Land Valuation Board, Land Title Registry, Office of the Administrator of Stool Lands, Survey Department, Town and Country Planning Department and the District Assemblies**), each operates under its own legal mandate under statute, whilst the customary institutions operate mainly under customary law.

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Conclusion

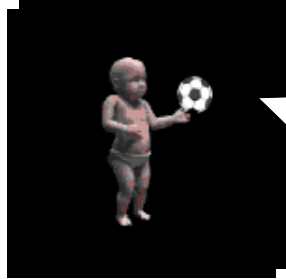
- For land surveyors to be effectively involved in the implementation of LAP in this new technological advancement there is the need to ensure that there are standards in;
 - human capacity development
 - general management and client relationships
 - processes and procedure of geo data administration

Conclusion Cont'd

- Spearhead the immediate reform of the provision in existing legislation that concerns standards.
- It is recommended that (LAP) should set up a technical committee on standards along side those being carried out by FIG.

FIG

Questions - DiscussionS



SOMEBODY HAS A GOOD EXAMPLE
ON MODERN TECHNICAL
SURVEYING INSTRUCTIONS??

- THANK YOU FOR YOUR ATTENTION