Overview of Mapping in Ghana

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Outline of Presentation

Background

Legacy Data on Maps

Challenges

Way Forward

5/29/2019

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Background

- The Survey and Mapping Division (formerly Survey Department) is mandated by the Survey Act 127 and Lands Commission Act 767 to conduct, supervise and regulate mapping activities in Ghana.
- Historically, the Survey and Mapping Division has relied on external funding and private sector participation due to limited human and financial resources.
- Map updates has therefore become inconsistent with the standard practise of updating maps every 5 years.
- The last time Ghana was mapped comprehensively was in 1974. Since then, mapping has been done for limited areas.

Legacy Data on Maps

- Mapping of Ghana between 1972 1974
 - \checkmark Division of the country into two blocks
 - Northern part by Terra surveys (Canada)
 - Southern part by Ordinance Survey (Britain)
 - ✓ Output were 1:50,000 Topographic Map series for the whole country
 - Ghana Urban Mapping Project (2002)
 - ✓ 2D line maps at 1:2,500 scale for selected cities
 - Ghana Coastline Mapping, courtesy Ministry of Tourism (2005)
 ✓ Orthophoto production at 1:10,000 for 9km inland of Ghana's coastline
 - Land Administration Project, Phase 1 (2008)
 - ✓ Orthophoto production at 1:2,500 for 15,000 sq. km
 - Land Administration Project, Phase 2 (2013)
 - ✓ Orthophoto Mapping at 1:2,500 for 25,000 sq. km
 - ✓ 3D Line Maps for Northern Ghana approximately 17,000 Sq. Km
 - ✓ Lidar Mapping for 4,000 sq. km

Rational for Map Update

- Rapid Development and Urbanization
- Planning Purposes
- Utility Services
- Property Addressing
- Forestry and Mineral Resource Preservation
- Environmental Monitoring



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Limited Funding

Failure to Appreciate the importance of maps

Failure to adopt consistent map update regime

Lack of personnel and adequate training

Way Forward

- Land Administration Project, Phase 2 extension
 - Orthophoto and Line Maps for the whole country and selected districts
 - 239,000 sq. km for the whole country at 30cm GSD
 - 15, 000 sq. km for selected districts at 10cm GSD
- Public Private Partnership (PPP)
 - ✓ Orthophoto, LiDAR and Line Mapping of Ghana
 - Total area to be covered 239,000 sq. km.
 - To be flown at 30cm GSD
 - ✓ Orthophoto, LiDAR and Line Mapping of sixteen (16) regional capitals and selected towns
 - Total area to be covered 15,000 sq. km.
 - To be flown at 10cm GSD.

Poster, Map

Expectations of the NMA to International Associations (FIG)

- Setting standards for NMAs to regulate new technologies e.g. Drone Mapping, BIM, CORS etc
- Facilitate capacity building for NMA personnel
- Recommend experts/professionals to support NMA activities
- Advice on sourcing of financial support National Geospatial Projects
- Give technical advice on planned projects

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