

**A PRESENTATION BY THE PAST DIRECTOR OF SURVEYS
OF GHANA
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ON THE TOPIC:

**BUSINESS MODELS AND SUSTAINABILITY OF *NMO's*
WITH FULL GOVT. FUNDING –THE SITUATION IN SURVEY
DEPARTMENT OF GHANA**

JULY 2007

The topic is been treated under the following main items

- Introduction,
- Objectives,
- Maps produced
- Stakeholders
- Financing map production
- Revenue generation
- Proposals for cost recovery
- Conclusion

Introduction

- Survey Dept. is the sole national mapping agency.
- Established in 1901 as Mines Survey Dept.
- Became Gold Coast Survey Dept. in 1908.
- Responsible for planning, supervision and execution of all national surveys and mapping for socio-economic development.

Objective is to direct and advise govt. on survey/mapping and undertake the following

- Framework surveys
- Topographic mapping
- Large scale mapping of cities and towns
- Cadastral surveys
- Parcel Plan preparation for Land Title Registration
- Demarcation of intern'al boundaries
- Demarcation of stool land boundaries
- Sea level observation
- Map revision
- Aerial photographic supervision
- Offering survey and mapping training

Maps produced are:

- Proprietary (cadastral) – 1:2,500
 - Topographic – 1: 50,000
 - Large scale town/city maps – 1: 2,500
 - Thematic
- (are in either hard or soft copies)

Stakeholders or map users are:

- | | |
|---|--|
| • District Assemblies,
Electoral Commission
Statistical Service | • Universities and other
educational institutions |
| • Land Sector Agencies | • Ministry of Agric. and
its departments, |
| • Road Construction
Agencies | • Ghana Tourist Board, |
| • Utility Agencies | • Geological Survey
Dept., Minerals C'ssion |
| • Environmental
Protection Agency | • Forestry C'ssion,
Forestry Dept. |

Financing map production

- By government
- By the World Bank and other Developing Partners
- By the private sector
- By individuals

Revenue generation

- Budgetary allocation in 2004 for the Dept. was US\$1,400,000
- Revenue generated was US\$315,000
- Basic production cost for 2 sq. km at a scale of 1:2,500 is US\$2,200 (i)
- No. of sheets for reproduction is 200 (ii)
- Cost of production per map sheet is given by: (i), (ii) and cost of reproduction of 200 sheets... (iii)
- A map sheet costs US\$12 to produce in (iii)

Revenue generation cont'd

- But map sheet is sold at US\$5.5
- Yet pace of sales is very slow
- If No. of reproduction is increased to 1000
- Unit cost of production will be low
- But again, pace of sales will be extremely slow
- Cost of production of Cadastral plan is US\$120
- But fee charged the public is US\$35
- Revenue generated is paid into government chest.

Other sources of revenue

- Cost of digital large scale town map is US\$55
- Cost of digital topo. Map (1:50,000) in a tile of 4 sheets is US\$110
- Cost of loan of aerial photo for 2 weeks is US\$3.3 per photo
- Sale of survey stationery and data

Proposals for cost recovery

- Revenue is mainly from Cadastral plans
- But flat rate is charged irrespective of location of property or parcel
- Adoption of 'first degree price discrimination' (Blakemore)
- More revenue to be generated if different fees are charged for different locations
- Removal of rebate for public agencies
- Economic rates to be charged to make possible cost recovery
- Use of satellite/computer for affordable prices

Conclusion

- Full cost recovery by many NMO's is not possible
- Central governments must continue to finance NMO's
- Adoption of 'zero-degree price discrimination' (Blakemore)
- Appreciable percentage of the cost must however be recovered.

Thank you