

CHALLENGES OF THE NATIONAL GEOSPATIAL AGENCY REGARDING ACCELERATED DEVELOPMENT IN NIGERIA

INTRODUCTION

Geospatial information (GI) has proven to be a vital tool for decision making and national development issues such as poverty alleviation, food security and the general development of the quality of life. It also plays a key role in national economic planning and natural resources management, regional integration and international cooperation. Being very critical to various sectors of the economy, GI is now employed for planning and decision making processes in over 80% of the developed world.

In Nigeria at the moment, GI is acquired and stored by various government agencies such as, The Office of the Surveyor General of the Federation (OSGOF), the National Planning Commission (NPC) the Independent National Electoral Commission (INEC) the Private Sector and others for their own use and application with attendant problems of irrelevant overlaps and duplication. These datasets are usually inaccessible to other users and lack conformity in standards and format. The absence of appropriate legislation on digital products has not helped matters either.

The establishment of a National Geospatial Data Infrastructure (NGDI), backed by a national policy and appropriate legislation will certainly eliminate most of the problems experienced today. This process is in progress.

THE JOURNEY SO FAR

- Nigeria has had her NGDI policy since 2003. This policy has been presented to the Federal Executive Council (FEC) which has agreed upon the policy in principle since 2006.
- Nigeria attended the Global Dialogue on Emerging Science and Technology (GDEST) workshop 2008 organised by the US Department of State of the Science and Technology Adviser in Cape Town, South Africa from 17th to 19th March 2008.

- Technical Assistance is being currently provided by the United Nations Habitat in developing national geoinformation resources to assist in establishing the National Urban Observatory which will eventually be linked to the Global Urban Observatory. The observatory is expected to collect and process data on pertinent urban and housing indicators for policy formulation.
- A Federal Land Information System was established in 2004 with the assistance of Her Majesty's Registry in the spirit of international cooperation in the area of geoinformation.
- The implementation of the computerization and modernization of land administration through Federal Land Information System is being pursued to promote human resources development in that area. State governments are being encouraged to implement Land Information Systems. Appreciable success has been recorded in this direction as typified by the Lagos and FCT examples.
- A National Scientific Advisory Group has been set up for the African Geodetic Reference Frame (AFREF). The group was inaugurated in September 2008.
- A stakeholders forum was successfully organized to sensitize the geoinformation community about the relevance of the programme and its importance to Nigeria and Africa in general.
- Five officers from the office of the surveyor General of the Federation (OSGOF) – the National Mapping Organisation- participated in the training program on GNSS/CORS installation and data processing conducted in Kenya between 18th and 29th August 2008.

CHALLENGES

Nigeria is a vast country with diverse cultures and mental orientation. Perhaps the greatest challenge is to get the geoinformation community in Nigeria to arrive at a consensus on data sharing and the pricing of digital data exchange.

- Political Will - The government of Nigeria, and indeed much of Africa, have the political willpower and commitment to advance the NGDI project.

However, they are limited by low finances coupled with continuously rising costs of projects.

- Instrumentation – It is sad to note that a lot of the stakeholders in the geoinformation community in Nigeria and indeed Africa still operate with analogue instruments. Geospatial information dissemination demands a digital environment both in data capture and presentation. More than 50% of our Surveyors are yet to attain this status.
- Manpower Development and Management – As in the case of instrumentation, the manpower situation in Nigeria is largely analogue. This situation is made worse by constant embargoes on employment placed by various state governments. There is need to ease off aging and untrainable staff and replace them with those who can work in the computer environment. This problem is a difficult one as it brings to thought the plight of those who will eventually be eased off.
- Public Enlightenment – Geospatial information can only fast track accelerated development if the operators of development understand the relevance of survey data in planning and decision making. OSGOF has been engaged in workshops, symposia and electronic media campaigns to sensitise the general public on the cost saving advantage of employing geospatial data in planning and decision making. At present, only government agencies and multinationals employ geospatial data in planning and decision making.
- Funding – The World recommendation of 2.5% of national annual budgets to be devoted to surveying and mapping can hardly be met by any African country. Yet, like the rest of the world, the Mapping Agencies in Africa are faced with the need to transform their operation from analogue to digital with its attendant demand of modern instrumentation and retraining of existing manpower.
- Pricing of digital datasets – Perhaps the greatest controversy surrounding the exchange of digital datasets is the pricing of such datasets and mode of payment in a transaction where neither buyer nor vendor are physically together. In the advanced world where credit cards are mostly used for

transactions this might not seem such a problem but in a country that relies largely on cash transactions, e-payments become a problem.

RESPONSE OF THE GEOINFORMATION COMMUNITY IN NIGERIA TO THE GLOBAL ECONOMIC CRISIS

The Global economic crisis caught up with the developing countries at a very critical point in their development process. In most African countries, as is in Nigeria, the crisis came up at a period of transition from analogue survey and mapping operations to the digital phase. Since digital equipment and processes are capital intensive, it became imperative that the geoinformation community must evolve some cost-saving responses to keep operations on-going. Some of these responses include:-

- Equipment loaning and leasing
- Formation of consultancy companies by institutions such as the Nigerian Institution of Surveyors (NIS); Institutions of higher learning offering Surveying and geoinformation.
- Merger of some one-man Survey and Instrument vendor companies.
- Recourse to Bank support for projects execution.
- Recourse to foreign partnership support for projects execution.
- Recourse to local Training and retraining of staff on the African International Scene.
- Regional cooperation on staff training and retraining is encouraged
- More recourse to Dialogue and Negotiation in Boundaries demarcation and Survey rather than escalating conflicts to war situations.

CAREER CURRICULUM VITAE OF
SURVEYOR AUSTIN P.C. NJEPUOME
THE SURVEYOR GENERAL OF NIGERIA

- Attended the University of Ife, Ile-Ife, Nigeria from 1973-1976 where he obtained a BSc(Hons) degree in Geography.
- Employed by Federal Surveys Department of Nigeria (now Office of the Surveyor General of the Federation) in July 1977 as a Pupil Surveyor.
- Trained at the Federal School of Surveying, Oyo, Nigeria from 1977 to 1979 where he obtained the Professional Diploma Certificate in Surveying.
- Attended many short courses in Surveying, Photogrammetry and Remote Sensing in Nigeria and abroad.
- Registered by the Surveyors Council of Nigeria (SURCON) in 1989.
- Worked extensively on survey projects in Nigeria and was the Director (Boundaries) in Nigeria's National Mapping Organisation before his appointment as the Surveyor General of the Federation in October 2006