

## Brief history of hydrography in Africa.

The discovery of hydrocarbons in the early 1960s along portions of the West African coastline precipitated the need for technological advances in hydrographic positioning and depth measuring devices. Consequently, the emphasis in national hydrographic capacity shifted from nautical charting to oil and gas exploration. Whilst the demands of the worldwide offshore industry brought dramatic advances in hydrographic technology, its application for traditional charting surveys continues to demand a high degree of professional understanding and engagement. Today, the Multi-beam Echo Sounder (MBES) and Global Positioning System (GPS) have become the surveyor's tool of trade for depth and position, as opposed to the Lead Lines or Single Beam Echo Sounder (SBES) and the Sextant of the 1960s. However, employing the MBES and GPS in hydrography presents issues, which are constantly under appraisal by various user groups through research, papers, seminars, workshops and conferences. What makes these issues more challenging and equally interesting is the disparity in results obtainable between geographical locations. This probably underscores the plight of the hydrographic surveyor globally, particularly in areas of extreme environmental conditions, like the tropical West African Region. The geographical extremities of West Africa lie between 5° & 25° north, and 18° west to 24° east. The region represents about one fifth of the entire African continent, which translates to a total land area of 7,324,000km. The Sub Region comprises the states of Benin, Burkina Faso, Chad, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Cape Verde, Liberia, Mauritania, Mali, Niger, Nigeria, Senegal, Sao Tome and Principe, Sierra Leone and Togo

## Ways to improve of capacity rate of employment in Nigeria.

### PARTICIPATION & COMPETENCY

We can also say that viewing participation as an intervention to achieve this goal, has produced disappointing results and suggests that viewing participation as a product, raises expectations that experience shows cannot be met which can influence the development of service strategies for people without jobs. This chapter presents arguments as to why participation is important for improving hydrography situations, particularly for the purpose of job employment and how participation can be a key factor. It begins by noting that the contribution of participation to hydrography is a development and how this can affect the Nigeria in reducing the unemployment rate in Nigeria.

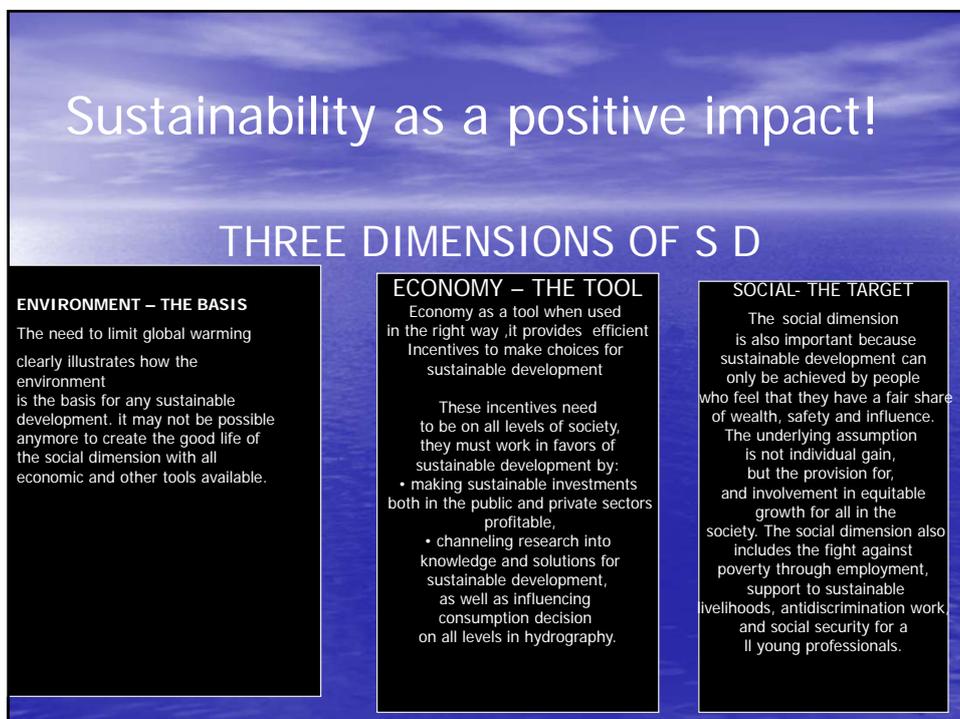
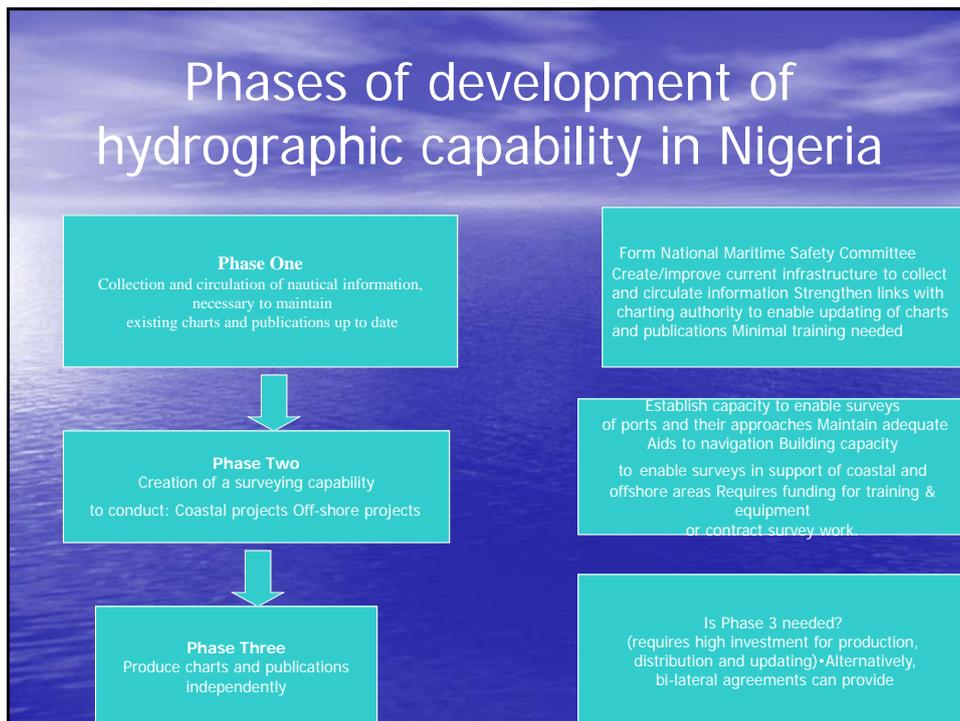
- The World Bank's reasons for community participation are:
- Unemployed graduate have a great amount of experience and insight into what works, what does not work and why.
- Involving unemployed graduate in planning projects can increase their commitment to the project.
- Involving unemployed graduate can help them to develop technical and managerial skills and thereby increase their opportunities for employment.
- Involving unemployed graduate is a way to bring about 'social learning' for both planners and beneficiaries. 'Social learning' means the development of partnerships between professionals and
- Fresh graduate , in which, each group learns from the other (World Bank, 1966).
- At the end of any /every project ,more people become stilled and therefore and there marketable or can become self employed, people become empowered.

### COMPETENCY!

#### THE REASON FOR EMPLOYMENT IN NIGERIA

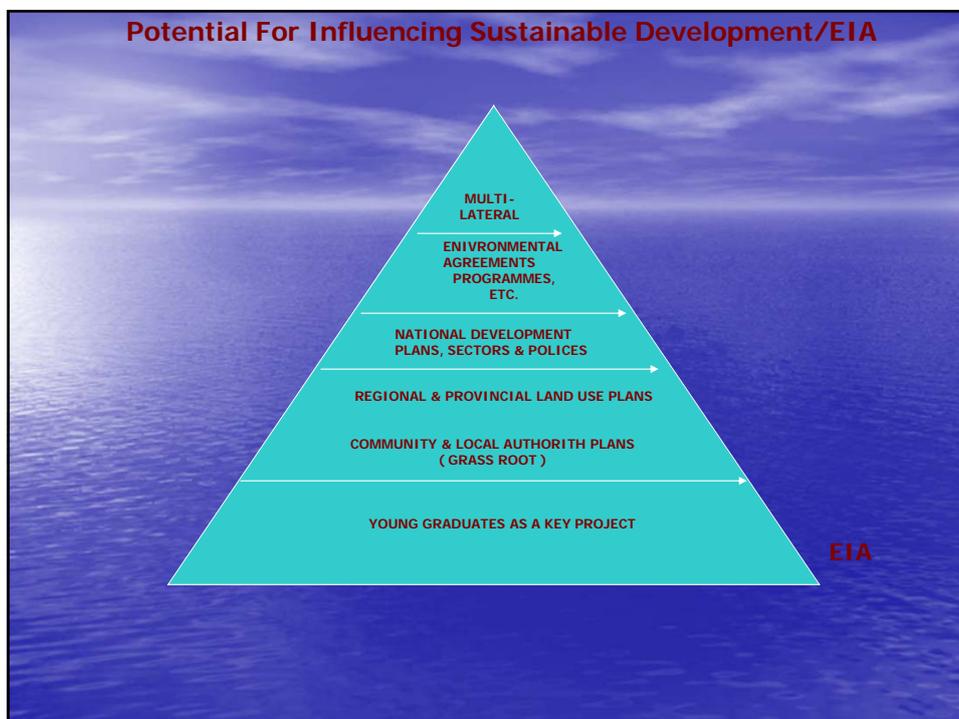
The best way to understand performance is to observe what people actually do to be successful rather than relying on assumptions pertaining to trait and intelligence.

- The best way to measure and predict performance is to assess whether people have key competencies.
- Competencies can be learnt and developed.
- They should be made visible/accessible
- They should be linked to meaningful life outcomes that describe how people should perform in the real world.



## EIA AS A KEY SUPPORT TOOL!

For EIA to fulfill its real potential In NIGERIA, Nigerians needs capacity-building for administrators, surveying and the public; monitoring compliance with EIA recommendations; sharing of 'best practice' across the region; linking EIA with the full project life cycle; harmonization of legislation within the Profession; And strengthening the links between EIA, regional planning and other high-level decision making processes. The African Development Bank (1994) points out that the main purpose of an EIA is not to justify the appraisal of a project per se, but rather to provide alternative scenarios which fully reflect environmental costs and benefits.



## PROBLEMS NIGERIAN HYDROGRAPHY SECTORM IS FACING

The fact that its practice has been on for over a century, the level of hydrography awareness is very low in Nigeria .That there are no institutions in Africa offering Category A (Professional) category B (Technologists) training in hydrography. Even those engaged in technical training are very few.

That there are no strong institutional and legal frameworks that will enhance or facilitate the development of hydrographic practice in Africa.

That the few Hydrographers we have in Africa are mostly in the Oil Industry and the Navy.

### **The need for hydrographic sector in Nigeria**

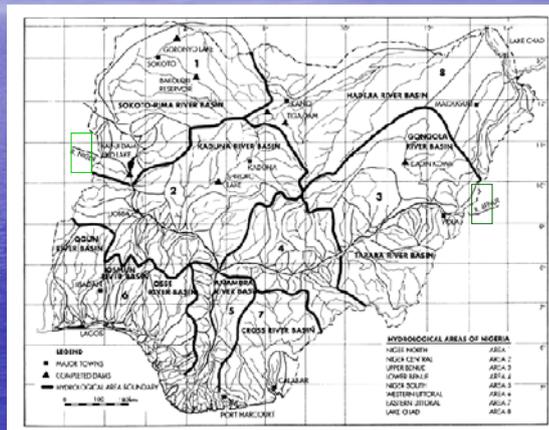
In Nigeria, the 1999 constitution vested the charting authority for Nigeria on the Nigeria Navy (NN). The NN Hydrographic Office (NNHO) performs this duty on behalf of the NN. In fairness, considerable efforts of NN the truth is still far fetched that nothing has been done so far.

Considering that Nigeria has rivers and hydrographic has being a profession to a few , it is of great interest to note that if hydrography becomes a major sector for the republic on Nigeria the rate of lack of employment will reduce by 5% if not more because this will bring about the employment of fresh graduate in surveying, geology engineers and other professions .

## Recommendations

- Set aside 5% of their national income derived from the maritime sector for the development of Hydrographic Surveying in Nigeria .
- Strengthened existing institutional and legal framework to facilitate the development of hydrography in Nigeria using such organizations as regional bodies establish training institutions in Hydrography capable of training category A (Professionals) and category B (Technologists) Hydrographers in Nigeria
- Collaborate on issues of hydrography to synergize and fastrack the development of hydrographic practice.
- Called on IHO and the various concerned bodies in the countries to be able to encouraged to step-up their partnership for the development of Hydrography in their various domains so as to create more jobs for the young professoinals
- Called on all hydrographer in Nigeria to be proactive and work assiduously for the development of hydrography.
- Called on all Government Survey Directorates to establish Hydrographic Offices in their organizations.
- Called on all professional institutions in surveying in Nigeria to create more awareness on hydrography.

THIS MAP SHOWS A VERY SIMPLE ILLUSTRATION OF RIVERS ROUTE



This is to say that if each river is monitored by a team of the survey technology, one can imagine how many would cover the rivers in Nigeria that way creating more job opportunities for the young professionals. Thence this will bring about more employments and reducing the rate also. At the end of any /every project, more people become skilled and therefore marketable or can become self employed, people become empowered.

## Conclulsion

Having identified the deficiency, the Nigeria Navy NN, and the survey regulatory body the office of the Surveyor general of the federation (OSGOF) should discuss the issues facing us today, on how the hydrographic practice can be enhanced, because this places the surveying profession in a pivotal position, not just technically to undertake data collection for planning, but also on a strategic policy level, contributing to decision making and asset management.

