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Research is the fulcrum on which every economy rotates. The Nigerian Institution of Estate Surveyors and Valuers as a professional body is highly committed towards the growth of the Nigerian economy and is determined to help grow it through the research efforts of contributors to the NIESV Journal.

In this edition, the Editorial Board has packaged ten scintillating and well researched papers in the various areas of interest to the profession. This edition features empirical studies on the application of geographical information System (GIS) to land management, a phenomenological approach to valuing contaminated farmlands in Nigeria, the error in ordinary annuity assumptions in Nigerian investments valuation, appropriateness of cost method in valuing income producing properties for bank loans, factors affecting the reliability of real estate investment appraisal methods and the education and training of Plant and Machinery Valuers in Nigeria.

Other highly educative and informative articles included in this issue are on the role of the Estate Surveyors and Valuers in enhancing internally generated revenue (IGR) through property rating, the imperative of social housing in the South-South region of Nigeria, dew process and public procurement in Nigeria as well as steps to effective succession planning (ensuring leadership continuity in real estate firms)

In our avowed determination to make the Journal serve as a ready platform for the exchange of ideas between academics and practitioners while encouraging collaborative research, selection of manuscripts are now subjected to the double blind peer review process aimed at producing scholarly works that are acceptable to a wider readership.

The determination to give the best to our noble profession is the primary goal and commitment of the Editorial Board.

EMOH, FIDELIS .I. Editor-in-Chief

and asked him if he felt I could do those tasks," Bradford says. "I would put time on my calendar to participate in any activity where I felt I needed to learn something." Encourage your potential successor to become actively involved with the learning process, evaluating his or her readiness, and then offer him or her paths to take to acquire the necessary skills.

Start grooming. How you prepare the next in line will vary based on your corporate culture, but Bradford believes that exposing your candidate to your strategic thinking process and planning is a good start. Have the candidate get involved in the strategic planning. Help him or her embody what your vision for the company is, because after all, sustaining your vision of the company is really why you're choosing a successor.

Many organisations lack succession plans, a situation that sets them up for various types of failure. The only viable option is to commit to instituting a succession plan, acting with a keen sense of purpose, strategic direction, urgency, and unwavering commitment. Succession planning success requires a proper sense of strategic direction coupled with having the right controls in place, such as policies and guidelines that are tied to measurable outcomes. Engaging the organisation's stakeholders in the implementation and the execution of the succession plan is critical. The management team must ensure that the plan is executable; announce the plan; properly introduce the plan, genuinely validate its need; and effectively communicate the mission, vision and objectives of the plan with determination and firmness (Robinson, 2012).

5.0 CONCLUSIONS

What is Succession Planning and what role does it play in your organisation? As indicated by Stensgaard (2007), succession planning is nothing more than having a systematic process where business owners identify, assess and develop their employee to make sure they are ready to assume key roles within the company. Succession planning is about developing and implementing a system, a practice of activities on a recurring basis. Then, when an employee leaves, the system almost naturally refills the position with the most suitable candidate (McNamara, 2010). Having this process in place is vital to the success of the organisation because the individuals identified in the plan will eventually be responsible for ensuring the company is able to tackle future challenges. These "high potential" candidates must be carefully selected and then provided training and development that gives them skills and competencies needed for tomorrow's business environment. These high potential candidates will one day become the leaders of the company. This is why their development needs to incorporate a broad range of learning opportunities in the organisation concerned. The individuals should also be exposed to as much of the working environment as possible so that they gain a good understanding of what the company requires to remain successful.

Succession planning is an active process, requiring business owners to have a clear 'line of sight' (LOS) that allows them to establish clear objectives and take deliberate action. Given the dynamic nature of modern organisations, business owners can no longer afford the luxury of simply hoping they find suitable candidates to fill key roles. Frequent turnover and transitions, an aging workforce, and economic instability are but some of the forces that create situations of uncertainty with respect to job longevity, even at the highest levels of an organisation. As such, succession planning should be recognized as an active, ongoing process that requires continuous preparation and monitoring. "Without light, there could be no 'Line of Sight' (LOS)." Regardless of industry or sector, "succession planning" is an active process, requiring business owner to have a clear 'line of sight' (LOS) that allows them to establish clear objectives and take deliberate action. Given the dynamic nature of modern organisations, business owners can no longer afford the luxury of simply hoping they find suitable candidates to fill key roles. Frequent turnover and transitions, an aging workforce, and economic instability are but some of the forces that create situations of uncertainty with respect to job longevity, even at the highest levels of an organisation. As such, succession planning should be recognized as an active, ongoing process that requires continuous preparation and monitoring (Robinson, 2012).

Finally, organisations that understand the need to manage the development of their high performers are a step ahead of their competitors. The effort required to establish a development program for future leaders or successors is worthwhile because it creates a motivated and capable group of employees that are ready to move forward in the organisation when the need arises. Effective succession planning can help ensure that the company concerned maintains leadership in key positions, ensures business continuity, retains and develop intellectual capital and encourages individual development.

Fully engage all the stakeholders. There are many stakeholders in succession planning, and it is important that each be brought into the process in a timely manner. This process starts by engaging the board in the development of a forward-looking skills-and-experience profile for the business owner. The profile should be a living document refreshed as necessary to take changes in strategy or market conditions into consideration. It should also go beyond the traditional position description and delve deeply into both the competencies and experiences required for the next leader. It can then be translated into a dashboard for grading succession candidates in an objective manner.

By engaging the entire organisation, potential weaknesses about the succession plan can be identified; these weaknesses were probably not visible to the management team prior to undertaking the succession planning process. It will ultimately enable the organisation to uniquely position itself in the succession planning process. and give the organisation the line of sight needed to identify core resources (tangible/intangible), core capabilities, competencies, and the strategic value of each one. Tangible resources (financial position, technology, and internal expertise) are assets that can be seen, touched and quantified. Yet intangible resources are important too, and range from intellectual property rights to reputation and culture (leadership, support, process flexibility, technical knowledge, employee engagement, innovation, and morale, commitment to succeed and implement the plan, and overall focus). These are critical strategic factors that must be considered.

Analyze and record what your function in the organisation is and the value that the business owner creates. The retiring business owner should start by writing down his own job description. He needs to think about what he spend his time doing and what do he does particularly well. If he has a lot of time to devote to this, he might want to keep a log of what he does from week to week, suggests Bradford. He might even want to consider bringing in an outsider to assess what he does if the company has adequate resources to do so.

Look at people in your organisation and figure out which people could do your job half as well as you. "I don't believe most business owner believe anybody could do a job as well as they do," Bradford says. He suggests looking at the three or four most critical elements of the CEO's job and picking out the main skills required

to be successful in the role. "For example, in a company where the business owner has a big marketing function that involves combining an understanding of the customer, some statistical analysis, and a vision for what the company will do to create value for the company's clients. Consequently, the retiring business owner will need to examine a candidate's skills in the following areas: leadership, marketing, finances, and operations. "The leadership skill is probably the most important," Bradford says. "It involves a difficult balance of knowing when to push, to check, to actively manage people, and when to step back and let them do things they can already do very well." The key to the success of an internal succession planning analysis is the ability to identify the value proposition of the plan, which highlights an organisation's future and offers stakeholders a sustainable and strategic sense of direction to take the next steps.

Take the people you think could do the job and have them do a self-assessment. "You want to look for someone who can be honest with him or herself," says Bradford. The assessment should include questions that help the individual evaluate his or her weaknesses in key leadership areas. According to Bradford, the assessment should include questions like:

- What are my strengths and weaknesses as a manager? What tasks do I perform well, and what tasks should I delegate to others? (In most organisation s, you will want to break this down into the following categories: Leadership, Financial, Sales/marketing, operational/technical, and Strategy.)
- Do I have the perspective (operational, financial, market) to drive a balanced vision for the company? If not, what perspective do I need to add to my current level of experience?
- * What would I need to learn if I were going to become CEO?
- * What kind of help will I need to be a good CEO?

Compare your job description with your potential successor's self-assessment and develop a plan based on the gaps. "What are the gaps between what they need to be good at and what they are good at," says Bradford. Consider how this person is going to grow and be able to do your job and devise ways to get them there. When Bradford succeeded his father in business, he evaluated his skill set and compared them to his father's. It turned out that he had work to do, and they created a plan to ensure he received the skills. "I looked at what he was doing



y Dear Noble Colleagues, I am pleased to commend to you the first edition of our journal for this Council year. As you can see, it has been repackaged in both design and content to produce a truly professional journal.

The quality of this journal is a reflection of how we have been running the affairs of your Institution since we took office in March this year with dedication, efficiency and above all in your best interest.

Our great Institution is marching forward and we have remained committed to our key programs for this Council year, viz:

1. Enhancing our public image in the media and amongst the populace and Government circles has been one of our key priorities. In this regard, we have continued to mount a sustained public awareness campaign in both the print and electronic media in order to enhance our public perception. There is no doubt that a lot still needs to be

done in this regard but we believe that we are making progress.

- Our issue with the EFCC remains a major cause of concern. You will recall that arising from our meeting with the EFCC Chairman, a joint committee was set up to work out areas of collaboration. The result of the Committee meetings was that EFCC insisted that all our members must register by 31st October, 2012 and commence reporting on transactions of N5m and above. I had to intervene with the Commission to get an extension till 30th November, 2012 to enable us table the matter before Council a concession the commission granted reluctantly. I also sought and received a legal opinion from our Solicitors on the issue. In the mean time, banks like GTB have been advertising that we, amongst many others, must provide evidence of our registration by February, 2013 in line with CBN directive. I understand that other banks are also doing the same. Whilst the registration procedure appears simple, the major issue has to do with compliance. Council at its meeting of Saturday 17th November at Benin, Edo State deliberated on the matter exhaustively and resolved that our members should be directed to register with the Commission, whilst our joint committee will continue to negotiate the compliance aspect.
- 3. We intend to submit a memorandum and relief materials to the Presidential Committee on the recent flooding incident in sections of the Country, which brought untold hardship to many people. We have prepared a memorandum encapsulating our advice to the government on the issue. Council also approved a donation of N1m to the victims. Council members equally donated an additional sum of N525,000 for this cause at its last meeting.
- 4. The NIESV Databank Plc project is on course. This project will on completion provide us with approximate rental and sales figures as well as yields for various classes of properties in selected cities all over the country. We believe that such data will help reduce the wide variation in our valuation figures for similar properties undertaken within the same period and for the same purpose, which has become very embarrassing to the Profession.
- 5. The Multiple Listing Service (MLS) has been test run in Lagos and is up and running and we now wish to encourage our members to log in and upload their properties on to the site. This is our new online platform for marketing properties for sales and leases, which will further set us apart from the quacks and lead to faster closure of transactions. I have

directed that the guidelines for uploading properties be circulated to all members.

- 6. Our Estate Agency Body: "The Association of Estate Agents in Nigeria" (AEAN) is now fully registered and the certificate collected. Our Faculty of Estate Agency has also been negotiating with the new Lagos State Agency body in order to fashion out a preeminent role for the new association. Our plan is to make it the main estate agency Association in Nigeria as a step towards realizing our desire to bring agency practice under control. We have put together a protem exco for the Association that will harmonize our interest with the Lagos State Agency body as well as work out modalities for membership and operations. The protem exco will be in office only for a short while pending when an AGM of the Association will hold and elect its officers by which time it is expected that new members, who may not necessarily be NIESV members, would have joined the body.
- 7. I am pleased to inform you that our Faculties are becoming very active and quite a few of them are now playing their expected roles. The Faculty of Housing held a successful one day Housing Summit in Lagos on the 8th of November. The event was well attended and was also financially profitable. The Faculty of Valuation and Compensation will, in partnership with the Rivers State Branch, be organizing an MCPD on the theme "Compensation Valuation" in Port Harcourt on the 22nd of November 2012 while the Plant and Machinery Faculty will be holding a 2-day seminar on oil and gas and aircraft valuation on the 28th and 29th of this month. The National MCPD will also come up on 6th of December. I wish to apologize for the closeness of the dates which may pose challenges for our members. This is partly due to the lack of a planned yearly calendar of events. The Assistant National Secretary has been directed to coordinate and produce a harmonized calendar of all Institution's events for next year which will be posted on our website in order to avoid a re-occurrence of the kind of tight schedule which we presently have.

Let me however encourage us to please attend these events as much as possible. We must all continue to train and retrain ourselves in order to ensure that our services remain progressively relevant to our clients. The Abuja Branch's MCPD was particularly instructive as it brought to the fore the need for our members to stop using the term "open market value" which has long been rejected by the IVSC and rather use the term "market value" which is the acceptable term. Incidentally, a lot of our members were obviously not aware of this which underscores the need for continuous training and retraining.

8. Our website is now up and running and this edition of "The Estate Surveyor and Valuer" will be the first online edition to be hosted on the site. I urge you all to always visit our official website (www.niesv.org.ng) and obtain all relevant information and also update your records.

I wish to commend our Editorial Board for their effort and the peer review process that has brought this edition to international standard.

I recommend the Journal to the reading delight of all our members, the educational institutions, government agencies, foreign missions and the general public.

Your friend and President.

EMEKA D. ELEH, FNIVS, FRICS

Is it clear about what authority that might be given to the potential successor and what authority might be retain by the current chief executive officer? In many cases, a CEO will bring in a successor and then jump into the role of chairman, but it is not clear what decisions the new CEO can make and what power the old CEO will retain. "A big issue is letting go of the power," says Dashew. Make sure that you are ready to give up control, that you know what that means, and that it's clearly communicated to your successor.

What are the values that are most important to the incumbent CEO that clearly define the organisation's culture? You must be sure the successor demonstrates commitment to those same values your company was built on. "It's one thing to say that I believe in a participative leadership style, it's another thing to have done that," Dashew says. The candidate should exemplify that he or she has those values, not just agree with them.

Has the incumbent CEO cultivated a team of people who can give effective support to incoming successor? To really succeed in the new position, the successor has to be readily accepted by the team. He or she needs support, and without the teams buy in, you risk undermining the succession process and jeopardizing your business's future.

According to Robinson (2012), succession planning has a future orientation, but it also has a sprouting present orientation. Thus, organisations must be doing something right now. They must first admit that they have no plan; then, they must be honest about why there is no plan and what it will take to develop one, and when one will be developed. They must then be honest about their available resources (financial, physical, human and organisational) and capabilities (technological) that are available to construct, implement and sustain the plan either in the short- or long-term. The plan needs to provide a clear line of sight about identifying, assessing, and developing future leaders and senior/branch managers (including departmental heads), as well as individuals to fill mission essential positions and roles throughout the organisation. The plan should be strategically aligned with training and development activities.

"In life we can have results or reasons. If you are not getting the results you want, your reasons are the lies that you keep telling yourself." Harald Anderson

4.3 Succession Planning Best Practices

As indicated by Matthews (2001), succession planning is, to some, an admission of their own

mortality. But without a plan, business owners miss out on being able to ensure business continuity and future direction. Thus, aging business owner also risk creating extra trauma for their businesses when there could already be trauma due to some unexpected accident or event. Bradford cited in Matthews (2001) suggested that starting with the understanding of two things about the business owner or chief executive officer's (CEO) role: balance and function. "A CEO needs a sense of balance" Bradford says. The CEO role balances finances, marketing and operations, and depending on what background the potential successor is coming from, the CEO should evaluate what the person's perspective is and discover ways to give the candidate the perspective that will allow him or her to balance their history or career with the new role. Second, the CEO's function is often that of visionary. CEOs spend a good deal of their time deeply involved in strategic thinking, and therefore, a CEO needs to involve a potential successor in his or her strategic thinking process. "Give him or her chance to learn by doing", Bradford says. You need to be able to grow the next CEO into the job as your company grows, which entails knowing the business's direction as well as CEO responsibilities.

According to Bradford cited in Matthews (2001), once there is an understanding of the new sucessor's role, then the need to put a plan into place. In this regard, Bradford offers the following steps:

Evaluate the resources you have at your disposal. The most important resource for this is time. How much time can be devoted to this? It will be necessary for the retiring business owner to sit down and write down his thoughts about the company including the company's vision and mission. It is also important to know whether there are other employees in the company with the skills to assess potential successors. Most business owners should have this skill inside the company already since it is a skill many CEOs themselves possess, but if not, you may need to seek an outsider to help in the assessment. Lastly, money may be an issue. If there is need for a consultant in assessing candidates or drawing up a succession plan, there is need to adequately budget for this. For smaller organisations, it might not be wise to spend money on this type of development unless you entirely lack the in-house resources to successfully assess candidates and put a plan in place. "For larger companies, it could be money well spent, as the company won't waste time reinventing the wheel," Bradford says.

4.2 Choosing a Business Successor

Choosing a successor is a process in itself that should be carefully thought through. Clear objectives are critical to establishing effective succession planning. Setting clear objectives will help:

Identify those with the potential to assume greater responsibility in the organisation;

Provide critical development experiences to those that can move into key positions;

Engage the leadership in supporting the development of high-potential leaders;

Build a data base that can be used to make better staffing decisions for key jobs;

Improve employee commitment and retention;

Meet the career development expectations of existing employees; and

Counter the increasing difficulty and costs of recruiting employees externally.

According to Matthews (2001), choosing a business successor entails choosing someone who is not only ready for the job but has the respect of key team members and the wherewithal to guide the organisation or company into the future. In the evaluation of the most suitable successor, it will be imperative to ask some key questions about the business and its direction (Matthews (2001) quoting Leslie Dashew, the President of the Human Side of Enterprise and Partner at the Aspen Family Business Group in Scottsdale, Ariz). The answers will provide a context in which a competent business successor can be chosen. As indicated by Dashew, Chief Executive Officers (CEOs) of companies doing succession planning often do one thing terribly wrong, which is "People tend to choose people they're comfortable with, people that are like themselves, and that's not always the right person." For instance, a father may want his/her child to be the next successor.

Robinson (2012) indicated that initiating a succession planning process is not easy. Difficult questions must be asked, both by and about management and other stakeholders. This type of introspection, analysis, engagement, and deliberate action is required to shed true light on the situation at hand, and to honestly answer the following strategic questions: Where are we now with our succession efforts?; Where do we want to go?; How are we going to get there?; and, What key action steps are needed to assist us with our forward progress? Leslie Dashew as quoted by Matthews (2001) suggested that instead of looking for someone who is similar to outgoing CEO, the organisation should do some strategic analysis by asking and providing answers to the following questions:

Where do you want your company to be in the future? Don't hire a successor for where your company is, but a successor should be hired based on where the company wants to be in the future. Outgoing CEOs have to realize that leading their companies into the future is going to take a different set of skills and perspective than they have, and thus have to evaluate candidates accordingly.

Who are the stakeholders? Who are the owners? Family members, employees, investors, a key management group? Who will this person report to? The person should engender trust and confidence among the owners of the business. Leslie Dashew opined that different scenarios will engender different experience for each type of owner and that in each scenario. For instance, if the company is going to go public, you'll want someone with that experience. If the owners are family members, the successor should be someone with whom they are comfortable. And if it's investors, be warned that those stakeholders will undoubtedly want to have input on whom the successor will be.

What core competencies needed in the **successor?** As a departing CEO looks at where the company is going, he or she should also look at the leadership talents the business will need to get it there. "Personality should be only one consideration. Other competencies such as strategic thinking ability, probably some kind of financial analysis capability, the ability to manage other executives or other managers," Dashew says. While there are many standard core competencies, like the ability to communicate well, you must also think about those competencies that are specific to your situation or industry.

Can the potential successor work effectively with the management team? According to Dashew, choosing a successor who is good with collaborative management or collaborative leadership is key. If a successor doesn't work well with you, the management team, and/or the other stakeholders, then the successor is doomed to failure.

How effectively will the successor work with all the company's stakeholders including the bank, auditing firm, legal team, customers and all other external influences? Establishing a sense of continuity during succession is important, and maintaining key relationships is paramount in this sense. If a successor strains or breaks business relationships, it could undermine your business's stability, and ultimately cause employees to leave or put your business at financial risk.

APPLICATION OF GEOGRAPHICAL INFORMATION SYSTEM (GIS) TO LAND MANAGEMENT: A CASE STUDY OF RAILWAY PROPERTY MANAGEMENT COMPANY LIMITED KADUNA

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ABSTRACT

The study used the Railway Property Management Company Limited (RPMCL) a subsidiary of Nigerian Railway Corporation (NRC) to demonstrate the application of Geographical information system (GIS) in practical terms. Database was constructed and features on paper plan/map were digitized as thematic layer including attribute data and exported to ArcGis 9.2. Queries were carried out to test user's requirement definition. It provides accurate and reliable information on all lands and building and thereby enhances land management practice. The result of the study shows that application of GIS technology can improve land management in government agency.

Key words: Geographic information system, Land, Property Management, Railway

1.0 Introduction

The application of Geographical Information System (GIS) to land management is fast becoming widespread even in the developing countries. In the Among the users of land based information are developed countries such as United State of America, several municipal counties now uses GIS technology to handle various aspect of land and property management (Wang, 2000). Thrall (1998) argues that recent innovation in GIS technology will have a profound effect on real estate and related industries. This is because real estate practitioners have long valued importance of location in their industry. Practitioners have always been interested in methodology that they can apply or benefit in their daily activities rather than academic exercise. The current advances in Information and Communication Technology (ICT) include faster computerization processing, inexpensive mass data storage, accurate data retrieval and user friendly software as well as highly competitive industry. Skilled real estate practitioners can easily perform geographical analysis in minutes. There are administration in Nigeria. This lack of central control other related developments including the advancement in computer hardware and software Decree of 1978, which vest all land in the country on technology which led to the development of Geographical Information System (GIS) as a tool for the citizens.

effective management of spatial data and an efficient support for decision-making process.

prospective landowners, lawyers, surveyors, valuers, real estate manager and government agencies at all levels of governments. adoption of GIS technology in the area of land management and administration is a challenge to developing countries such as Nigeria. As at 2008, apart from the effort by the Federal Government through her development agency (Federal Capital Development Authority (FCDA), only four out of thirty six states (Enugu, Lagos, Abia, and Kano) in Nigeria have made substantial effort in applying GIS or IT in their land administration system (Adeoye 2004). Ukaejiofo (2007) argues that among the few states that have initiated GIS in land administration, the extent, content and sustainability of the programmes may not be easily ascertained because there is little or no central control of land of land administration is the offshoot of the Land Use the Governor of each State who holds it in trust for

In government agencies property records are maintained by both the Head office and the Zonal offices and sub-zonal offices throughout the country. Typically, each office develops its own record keeping system with little interaction among other offices to improve their record keeping techniques. Different file numbering systems are employed by the Head office and the various offices. All the offices still adopt the traditional or manual methods for filling, recording and retrieval of information. This practice is prone to difficulty in information sharing and dissemination.

The Map or Layout plans presently used by government agencies is obsolete, not having been updated in nearly fifty years. The current information on the real estate of government agencies are not easily obtained. For instance the current vacant lands and properties in use by the Nigerian Railway Corporation (NRC) cannot readily be obtained. Prospective users are required to scouts for the undeveloped site and unoccupied properties themselves before contacting the relevant officer for allocation. This circumstance is prone to double allocation of particular parcels due to non-charting of already approved and non approved lands. This situation may also result in litigation.

Can the application of GIS technology improve land management in government agencies? The assumption has been that GIS provide accurate and reliable information on all land and buildings and

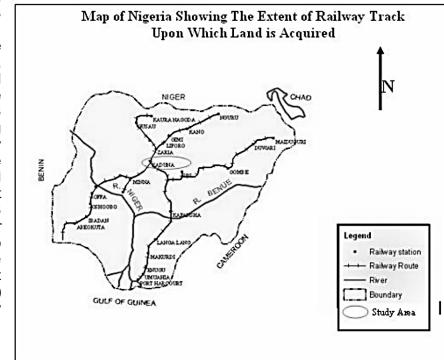
thereby enhance land management practice. GIS technology should, therefore, facilitate, simplify and reduce the cost and time of data processing, storing and retrieval of land records. In this article, we demonstrate the application of GIS to land management by providing practitioners with the methodology and process of using the technology in daily practical situations. We show the current and potential contributions of GIS to real estate practice. The paper adopts a step-by-step approach to the application of GIS using the Railway Property Management Company Limited (RPMCL) (subsidiary of Nigerian Railway Corporation).

2.0 Existing land management situations in the study area

Railway Property Management Company Limited is

a subsidiary of the Nigerian Railway Corporation which was established in October 1996. The Nigerian Railway Corporation (NRC) landed properties comprises those parcels of land on the two main land corridors running from South West to North West (Iddo to Nguru) and South East to North East (Port Harcourt to Maiduguri). The NRC land was originally acquired for the development of rail system across the country in 1956. The land was acquired based on the existing legislations at the time of acquisition and the compensation was paid accordingly. The tenure for the land acquired was 999 years. The width of the land corridors vary from 15.24m (50ft) to 30.48m (10ft) from the centerline of the track except at the Railway Station where the land is about 91.40m (300ft). There are also exemptions in some Railway Stations where special acquisition were made for purposes of providing not only the rail service but also staff quarters, workshops, station buildings, offices, warehouses etc. Examples of such include Lagos, Kaduna, Kano, Minna, Kafanchan, Enugu, Bauchi and Port Harcourt Stations.

The other parcel of lands owned by the corporation comprises those subsequently purchased or acquired after the establishment of the corporation in 1955. Thus, the extent of railway land acquired throughout the country was estimated at 46,603 acres (18,867 Hectare). Figure 1 show the present NRC track network with major stations in the country and comprises the strips of land on either side of the tracks.



Source: Nigeria Railway Corporation.

company, innovative approaches to leadership such as shared or co-leadership should be considered. Healy also states that a successful company succession process begins with a solid foundation, intention, and a deliberate architecture to ensure success. The following five-step process can provide a strong framework for effective succession practice.

Step 1: Building a solid company foundation: The key to a successful succession plan lies in building a solid foundation of profitability and growth for the company. This happens long in advance of the actual succession date.

Step 2: Co-developing the leader's exit strategy: Leaders should start with the end in mind. Any sound and successful strategy begins with a goal or vision of the desired outcome. The company leader codevelops a solid framework that acts as a road map for successfully navigating the challenges of the modern company world - including the exits and integrations of outgoing and incoming CEOs or executive directors. A company's board and key management staff must be involved with and support this succession planning process. Succession planning also must be "owned" in part by all staff. From the board standpoint, defining a clear vision for future leadership might mean setting up a boardappointed search committee that could include staff representation. One task of this committee would be re-examination of the company's defined vision, as well as identification of major issues the organisation likely will face in the next five to 10 years. The vision statement would be shared widely and could describe both the nature of the company 10 years hence and the qualities required of the new chief executive to lead toward that vision. If the current leader and senior staff team were right for yesterday and today, the new leader must be equally right for tomorrow.

Step 3: Minimizing the company's risk: In many cases, the illness, serious injury, or even the death of a business owner or company leader can be devastating and can mean peril for an organisation. The risk-related component of the succession plan ensures that the company, its members, and its staff are protected in the event of an illness, accident, or disability related to the top staff leader. Proper legal documentation, such as stakeholder agreements, insurance policies for key persons, and business and financial plans, must be in place. A good attorney and insurance consultant can help organize and ensure a company's efforts are comprehensive and well-implemented.

Step 4: Strengthening systems and processes: Strong companies must deploy strong management and strong systems. Critical factors that create

value at the end of the day for any company are continuous organisational improvement, membership focus, high-quality value offerings and services, and the finding, hiring, and training of the best possible staff. Essential competencies that a company needs in the future include:

Building the successor's business and leadership skills

Planning the development and retention of key persons

Creating an effective company structure

Developing management systems for peak company performance

Documenting systems and procedures to create efficiencies and support the effective transfer of knowledge

Implementing a proper strategic planning process that includes leadership transition

Hiring and training the best possible staff

Having accounting and financial controls and a comprehensive marketing plan

Step 5: Transitioning the leadership: The next step is to identify gaps between the required leadership and the existing talent pool. The organisation must decide if a new leader can be promoted from within or if an external search is required. It also must ensure that the future vision of the organisation is fresh and vital, so the selection of the new leader is based on choosing the right person to lead the organisation to the new vision. Another important task is determining the type of actions that will ensure a good fit between a potential leader and the organisation's culture. Matching the leader to the desired culture is critical.

Ideally, the incoming successor works with the outgoing leader for a period before taking office, although the current CEO carries full responsibility for the organisation until the day he or she leaves. This helps support some of the critical learning required by the new leader for them to be successful.

Business owners spend much time thinking about how to drive the company successfully forward, but they usually spend far too little time thinking about the right time and the way to leave. A successful transition can be a seamless, productive, and unifying experience. Most people will be remembered, in work and in life, for just a few words or deeds that made a difference to others. The way leaders choose to say good-bye is likely to be one of the ways they are remembered. If they execute their final leadership responsibility with the same care and attention that they gave to the first, their departure can be an inspiring gift to the firm and staff.

would certainly think differently if they could get a real-time report providing hard figures on the cost of employees spending time on trying to fill a position, instead of working on their revenuegenerating responsibilities.

4.0 SUCCESSION PLANNING IN PROFESSIONAL SERVICE FIRMS

Succession planning increases the availability of experience and capable employees that are prepared to assume leadership roles as they become available. The pending retirement of the business owner and the unrelenting challenge of finding and keeping talented staff can have grave consequences for firms that fail to develop a succession strategy. Succession planning is not limited to a single course of action. It involves evaluating different aspects of the firm and identifying systems, processes and policies that need improvement in order to position the firm for succession regardless of company's owner exit strategy. Options for succession include internal transition, practice continuation with other firms / merger, or turning out the lights when it is time to retire or when the firm owner dies.

What makes succession planning for professional service firms so difficult? Many professionals believe they will practice until the day they die. Age may slow them a little but they will just reduce their workload and carry on as usual. Thinking about succession is not on their agenda at all. For others, particularly in occupations based around having developed a personal relationship with their clients, there is a natural reluctance to let go of their book of business because of its importance in terms of status, compensation and leverage. Succession planning can be seen as a threat to their security and their reputation. In such circumstances even broaching the subject of succession can raise barriers and harm relationships among partners. It is little wonder that professional services firms have such a tough time confronting the issue of succession. A management succession plan that operates as part of the regular management practice of the firm, which is recognised as applicable to each partner in their turn, is the most politic (i.e. marked by artful prudence, expedience. and shrewdness) approach and the one that offers the best chance of a smooth and good for the business way of dealing with succession in these circumstances. The two key elements to achieving these are:

Having the necessary agreements relating to succession issues in place, and

Working to a succession plan that rolls out over a long term period.

Succession practice for professional services firms is one of those management issues that rarely get attention until a partner announces plans to leave or retire, or more disastrously, is suddenly removed by illness or death. Whatever the circumstances, the situation often throws a firm into crisis mode. Asmart professional services firm will plan for the broad spectrum of issues associated with partner departure well before the event occurs. Many of these issues are long-term in nature and can take years to phase in. They are best managed in the context of a longterm succession planning program geared to achieving the firm's strategy for identifying and addressing the gaps in capability that will inevitably occur from the face-down and retirement of a partner. This approach provides both the best strategy for ensuring the firm continuing success as well as the most politic manner of managing the personal issues raised by succession.

Research indicates many succession-planning initiatives fall short of their intent in estate firms because succession is one of those things everyone dreads and tries to avoid but without it, the business could suffer, or even fail, if something were to happen to the Managing Partner/Director unexpectedly. For that reason, it is never too early to start thinking about succession planning. After all, it is likely that, as the owner of a business, the success of your company is the main source of your economic stability, and it would be foolish not to plan for the future of your company.

A succession plan may develop over several years, and is constantly changing based on the state of the real estate business; fortunately there are steps that can be taken to ensure a successful future for you and your company. Succession planning is not just crucial in the event of death, but can be helpful should a partner in a multiple-ownership company want to take his or her exit. Without a plan in place of how the exit issue scenarios should be dealt with, the continuity of that business could be in serious doubt. Many business owners hope to see their business continue to exist after they are no longer alive. In that case, he/she will need to choose a successor, someone that he/she not only trusts, but whom can be groomed to carry out the business owner's wishes for the company.

4.1 A Five-Point Plan for Effective Transitions

A successful company leadership succession plan should maps the landscape, prepares for contingencies, and minimizes disputes. Simultaneously, such company needs to enable an orderly transition, ensure continuity, and build a legacy. Will it achieve these goals? According to Alana Healy, Executive Director of a Canadian micro-

As a result of these large expand of land the NRC lands are grouped into two:

Operational landed property and non-operational landed property. Operational landed properties are landed properties that are within the area critical to Railway operation. Any action on these landed properties will definitely affect NRC core activities either positively or negatively. Operational landed properties include but not limited to the following:

- Station Buildings and land within station limits with or without third party development that are tied to traffic generation.
- Residential Quarters and offices
- Warehouses and other storage facilities
- Workshops and Running sheds
- Engineering, coal work, reclamation and scrap yards.
- Hospitals, Recreational clubs, fields and play grounds
- Quarries.

Non operational landed properties include landed properties which are removed from day-to day running of Railway operation. The nonoperational landed properties include;

- Merchant plots (usually within station limit)
- Market on Railway land
- Strip of land along Railway Track
- Land given to NRC as alternatives to her own surrenders to various tiers of Governments.
- Other land outside operational area.

The Nigerian Railway Corporation has huge landed properties scattered through out the country. Various titles or documents that a third party can hold on railway land include leases, temporary occupation license, squatters permit, vendors permit, kiosk permit and way-leaves. A Lease is the highest and secured interest that third parties can posses on Railway land. It allows the holder to use, assign, mortgage, grant etc but subject to the company's consent. Its term span from five (5) years to ninety nine (99) years as the case may be. It is thus a determinable interest whose term expires automatically by expiration of time or upon determination of interest, the land and all appurtenances therein revert back to the company.

Other titles allow the licensee/tenant to occupy Railway landed property on annual or temporary basis. They have no legal interest in the property. The holder has no right to put up permanent structure on the land and where this condition for temporary structure is violated, the company is absolved against any claim for compensation should the company requires to use the property accordingly. The licensee pays annual ground rent on the land while in case of building or warehouse

he pays the rack rent. The principal idea behind this is that the corporation while making some revenue from unoccupied land/building which may be exposed to encroachment or dilapidation will be able to recover such unoccupied land at short notice without difficulty.

Way-leaves are the permits approved for passing road, drainage, electric wires or poles, cables, pipes etc across railway land. The holder pays a lump sum (premium) before the commencement of work which is supervised by the District Engineer.

In order to manage vast land and buildings of the NRC, scattered throughout the country, the management set up a subsidiary known as Railway Property Management Company Limited (RPMCL). The functions of Railway Property Management Company Limited (RPMCL) include the following:

Keep custody of and maintain estate records namely title deeds, layout plans, drawing registers and files.

Maintains and demarcates the Corporation landed property boundaries in line with vesting deed plan.

Safeguards Railway landed property against trespasses and encroachment.

Carry out various aspects of property valuation such as valuation for determine capital worth for sale or purchase, determination of compensation payable under compulsory acquisition, letting of property, fire insurance, mortgages, rating and other purposes.

Processing of lease applications, renewal of expired lease, temporary occupation license and other permits.

Carry out rent collections and rent review on Railway landed properties.

Advices Management on land matters.

Manages both the Railway operational and non-operational landed properties.

Maintenance of Railway Quarters, Warehouses and other Railway developed properties.

Carry out the functions of a property development company as spelt out also in the memorandum and Articles of Association of the Company.

The functions of (RPMCL) as a property development are as follows:

- To identify and verify all NRC unoccupied land and landed properties in and outside the country.
- * To take over, manage and commercialize all unoccupied and abandon buildings, structures

and such other similar landed properties of the corporation anywhere in and outside the Federation.

- * To invest its fund in excess of the corporations immediate requirements in revenue yielding ventures.
- * To prepare individual valuation appraisal and provide professional opinions in the open market value of each of all unoccupied property of the corporation.
- * To prepare a comprehensive list indicating the location of each of the said property.
- * To scout for and liaise with developers interested in joint development project of the corporation's property.
- * To acquire, construct stores, warehouses, workshop, easements, and shopping centers. etc.
- * The company shall enter into contracts for the construction, maintenance management or and repair of properties with other persons, corporate bodies of Government.
- To apply for, takeover purchase or otherwise acquires any designs, trade marks, rights or copyright or secret processes, which may be useful for the company's objects and to grant the use of same to others.

*To carry on the business of civil engineers / builders and carry on construction work of any land etc.

Therefore, the goal of managing and administering the railway property are to ensure economic and social advantages to both government and the users. Effective land/property management requires adequate/proper record keeping. Manual record keeping system is adopted in RPMCL. This system is slow and laborious, time wasting and costly as well as inaccurate. The major routine activities include property record keeping, preparation of schedule of condition/dilapidation, preparation of valuation report, routine inspection, rent review, collection of rents and other charges. Information are stored in paper files.

3.0 Literature Review

Land management is the process whereby the resources of land are put to good effect. It entails decision making and the implementation of decision about land (Dale and Mclanghlin, (1988). Decision may be taken singly by individual or collectively by groups. The routine operational decision made by land manager include: property conveyance (mortgage and investment); property assessment and valuation; development and management of utilities and services; management of land resources such as forestry, soil, agriculture; implementation of land use policies; environmental

impact assessment; monitoring of all land based activities as it affects the best use of the land. The basic resources in all decision making is information. Therefore it is the function of land information to support land management at each stage. Availability of good information can minimise mismanagement and taking of wrong decision. Efficient management of land and property depends largely on accurate and up-to-date cadastral maps and information.

Development decisions could be more effectively formulated if governments at various levels and the private sectors have up-to-date information on the location, the amount, suitability, and the estimated price of available land at their disposal. Root (1985) argues that without accurate information about lands and waters, without an up-to-date inventory of the country's resource and what is happening to them and the environment, the government and the people are handicapped in controlling their own destiny. Information is indispensable in all decision making processes on land. This means that information reduces uncertainty by helping to identify and analysis both simple and complex problems. Information which is mostly embodied in a map, at appropriate scale, are useful in a number of ways including description, registration, and sale of land, generation of revenue; planning; administrative and engineering works. In various tiers of government and government agencies or parastastals dealing with land management in Nigeria, the use of hand drawn and printed maps and survey plans are still useful in today's property management. However, it is believed that computerized systems offer an improved way of acquiring, storing, processing and retrieving information. The current technology to handle this is the GIS.

The United States Geographical Surveys (USGS) (2005) defines GIS as a computer system capable of assembling, storing, manipulating and displaying geographically referenced information, i.e. data identified according to their locations, including the procedures, operating personnel and spatial data that go into the system. Also, the Environmental Systems Research Institute (ESRI) (1991) defines GIS as an organization, collection of computer hardware, software, geographic data, personnel and procedure designed to efficiently capture, store, update, manipulate analyses and display all forms of geographically referenced information. Aronof (1989) argues that GIS as a technology helps to organize a data about problems and to understand their spatial relationship, thereby providing a powerful means for analyzing and synthesizing information about them. However,

Identify the required skills the organisation will need now and in the near future.

Business owner need to identify the responsibilities, skills and competencies that will be needed by their replacements.

Succession planning must be part of an integrated HR process that includes training, development and performance appraisal.

Succession planning must include a system for providing feedback and encouragement to potential successors.

The skills of potential successors must be developed through work experiences, job rotation, projects and other challenging assignments.

The training and development requirements of potential successors need to be determined.

Succession planning is not something a well-run company can ignore because the consequences of not being prepared to replace key personnel will have a major impact on an organisation's ability to achieve its goals and strategic targets. Thus, succession planning process need to be considered as part of the company's strategic planning process because it deals with projecting future changes by anticipating management vacancies and then determining how to meet these challenges. In its simplest form succession planning is nothing more than getting business owners to use a systemic process to determine the current training and development requirements of their subordinates.

3.1 Importance of Succession Planning

Many organisations lack succession plans, a situation that sets them up for various types of failure. The only viable option is to commit to instituting a succession plan, acting with a keen sense of purpose, strategic direction, urgency, and unwavering commitment. Succession planning success requires a proper sense of strategic direction coupled with having the right controls in place, such as policies and guidelines that are tied to measurable outcomes. Engaging the organisation's stakeholders in the implementation and the execution of the succession plan is critical. The executive leadership team must ensure that the plan is executable; announce the plan; properly introduce the plan, genuinely validate its need; and effectively communicate the mission, vision and objectives of the plan with determination and firmness.

Simply put, succession planning has the power to transform how business owners manage the future of their talent from top to bottom in order to positively impact bottom-line results. Done very

well, it drives an ongoing, proactive dialogue between business owners and key personnel that identifies and tracks the individual talents in key positions. Business owners can then put key contributors on a growth path where they can be most valuable to the company. Key benefits include (SuccessFactors, Inc, 2008):

Strengthen the talent pool: By helping business owner identify potential skills and competency gaps, companies can proactively train and groom talent across all key positions in the organisation. For example, a contributor with deep corporate "smarts" and knowledge of the business-critical processes is always difficult to replace. A departure in this situation can create a serious business continuity issue especially when the business owner cannot hire someone with that same intimate knowledge through an outside party. Succession planning provides proactive identification of these important "go-to" employees who can be further groomed for the job without losing the knowledge base which the company depend on.

Better career development: Succession planning facilitates genuine development of employees for both their own benefit and that of the organisation. After identifying an employee with high potential, it is understandable that a smart company will help train and support that individual in a way that also moves their career forward. There is a reciprocal aspect to this effort: open development compels employees to go the extra mile and stick around longer with the understanding that they have a future in the organisation.

Time savings: When an employee unexpectedly leaves, the time and stress involved with interviewing, hiring, and ramping up a new employee is a burden to any company. Effective succession planning translates to a definitive plan and reassurance that the organisation can dramatically reduce the effort to replace a key contributor by literally having the right replacement strategically engaged and ready to step in.

Cost savings: There are two primary ways that succession planning delivers measurable cost savings. The first and most obvious is in avoiding the significant out-of-pocket expense incurred by using a third-party placement agency or head-hunter. Secondly, the cost of reactively focusing on hiring and ramping-up a new employee. When a key contributor leaves, it can often take 6 9 months to bring a replacement up to speed clearly, a huge hit to productivity at many levels of the company. While some organisations might dismiss this as a cost of doing business, they

- Step 1: Get commitment: No succession planning program can work without business owner and employees at all levels clearly understanding why a succession program is needed. Acompelling case must be made for it. At the same time, executives, managers, supervisors and employees must clearly understand their role in the program.
- Step 2: Analyze the work and the people now: To prepare successors, business owner must know what work is done, how it is done, and what kinds of people do it best. This step requires the creation of up-to-date job descriptions, clear work outputs and work accountabilities, and job competency models to describe the characteristics of the people who do the work best.
- Step 3: Evaluate performance: Step 3 refers to performance management, the process of planning, managing and appraising worker performance over time. This step is important in a good succession planning program because individuals must be held accountable for the work they do, the responsibilities they shoulder, and the competencies they demonstrate. It is worth emphasizing that it is not enough to have any performance management system; rather, the performance management system must measure people against what they are expected to do, what results they are expected to achieve, and what competencies and behaviours they are expected to demonstrate.
- Step 4: Analyze the work and people needed in the future: The future will not necessarily be like the past. In this step, decision makers align the organisation's strategic objectives with the work and competencies needed to realize those objectives. The organisation's future requirements should be driven down to each level, job and function. The result should be expected future job descriptions and future competency models.
- Step 5: Evaluate potential: The potential for promotion to higher level responsibilities should be considered against the backdrop of the future. In other words, every individual who seeks promotion is really working to be developed on an escalator because the competitive environment within which the organisation performs is not static. Things are changing as individuals are being developed. It is not enough to assume that successful

performance in the past will guarantee successful performance in the future. Instead, organisational leaders must find objective ways to determine how well individuals will function at a future time and at a higher level of responsibility.

- Step 6: Develop people: This step focuses on closing developmental gaps found by comparing the results of steps 4 and 5. To carry out this step successfully, organisational leaders should establish an individual development plan (IDP) for each employee to narrow gaps between what the individual does now and what he or she must do successfully in the future to function at higher levels of responsibility. An IDP is like a learning contract. It is usually negotiated between an individual and his or her supervisor on an annual basis. Individuals are encouraged to identify, and plan for using, resources to help them build the competencies they need at higher levels of responsibility. Resources may include training courses inside the organisation, seminars or conferences outside the organisation, internal job rotation experiences, and many other competency building efforts.
- Step 7: Evaluate program results: How can the results of a succession planning program be evaluated? The answer to this question must be obtained by measuring program success against the objectives established for the program in Step 1.

It must be realised that succession planning and development of future leaders does not exist in isolation - it needs to reflect the company's strategic objective and strategic goals. For any organisation to implement an effective succession plan, the following key issues may need consideration (Ameinfo.com, 2005):

A system for communicating succession planning information to key personnel in the organisation must be established.

A systematic approach for identifying, nominating and selecting potential successors must be established.

Background information on potential successors, such as education, experience, skills, appraisals and potential should be reviewed.

Critical positions must be identified and included in the organisation's succession planning program.

Identify high-performers that are almost ready to step into those critical positions.

Hearnshaw and Unwin (1994) believe that GIS is a technology that is highly suited for generating visual spatial information which helps people understand relationships between information, concepts and ideas.

GIS has been applied to real estate in several ways, Thrall (1998) has shown that the key to any successful real estate transaction is timely information about the property, market condition, and transaction terms. In Nigeria, there are few known medium for providing such information. However, the fact remains that real estate transaction is by private treaty and there is no free flow of information to the real estate market. The consequence of this is that there is limited information about the transactions in housing market. No one knows the stock of properties and their locations in the market. Access to existing property market is in the hand of a privilege few. This forces buyers and sellers to make decisions based on imperfect information.

The introduction of GIS technology to land management would lead to the development of nationwide computerized open access to property database. Akujuru and Durojaye (2006) and Nuhu and Tunde (2012) report that the problems of using manual method of data handling have dominated cadastral information management in a disappointing manner among various departments and parastatals within Nigeria. They stress that, due to the increase in demand for cadastral information and requirement of users, the manual method is no more feasible. Hence, the need for a well coordinated approach to managing cadastral information which is GIS. They, however, did not demonstrate the applicability of GIS to land management. Current researches have moved away from theoretical models to practical and end users oriented models. It is only on this basis that researches can be meaningful and contributes to the needed transformation.

Vinh and Vinh (2005) applied GIS to District 5 Hochiminh city (HCMC) Vietnam when the district Government Agencies encountered a lot of difficulty in activities of urban Management. The city is about 4.14 kilometer square and with 251,999 people. The goal of the study was to establish, maintain and analyses urban land use information to support the functions of local government in district 5, Hochiminh city (HCMC). The study used ArcView GIS 3.2 software and the result showed that there have been really improved activities of district agencies in HCMC to serve people better in the area of land management.

Wang (2000) shows that ArcView GIS was developed to assist in the real estate market in Austin area. The database system assists realtors to locate a house for the customers and also assist real estate developers to determine the best locations for housing development. Thus with the assistance of GIS technology, developers were able to combine information, perform analysis and display results in a database. This means that GIS is a useful tool for selecting potential site for developments. The argument is that GIS is very powerful in aggregating and presenting data, especially its ability to present data in map (image) format. GIS not only possesses the power in presenting data in very efficient way, but also the ability to process data (vector, raster, tins and image data). The implication is that in a GIS based information system much of the information can be displayed on map and the customers can do the pre-selection at real estate practitioner's offices instead of driving around to see houses. After the pre-selection process, real estate practitioners and customers can narrow down potential candidates and make trip to only those chosen sites. Furthermore, if everything can be put on the web, real estate practitioners can let the customers do the pre-screening themselves and contact the surveyors after they have chosen some sites they are interested in. GIS application, in this area, does not only can save time but also costs as well.

Adeove (2004) argues that GIS application in land administration in Abuja, Nigeria, has been successful especially in the development of a comprehensive land policy for Nigeria in a systematic way. This statement is not correct. It may be successful in Abuja, but not for the entire country. GIS cannot be use in the development of land policy; rather GIS would improve security of tenure; simplify the process of acquiring land by the public use; foster prudent land management by establishing efficient system of land administration and; encourage the development of an organized land market. The Abuja Geographical Information System (AGIS) has brought about adequate and effective control of the allocation and use of land in Abuja. Thus the value of land information will bring about savings in time, money and energy that arise from the use of spatial information.

4.0 Material and Method Data source

Data, whether spatial or non spatial, is a very important component of any information system. It is in fact, the hub of a GIS application. A GIS depends on data stored in a database to answer real world questions or provide information about real world phenomena. In this study, official

documents from the zonal office of the Railway Property Management Company Limited (RPMCL), Kaduna provided the required datasets. These are spatial data about real estate or properties and attribute data in the domain of interest. The data collected include title, rent, tenant's names, land area and accommodation provided by buildings occupied, current land use, rent review period, vacant plots and so on. The survey plan/map of the study area was used as a base map for digitization. These include such information as the name and address of the owner of the plot, total area of the plot, coordinates, location, tenant's names, location, and title to land, physical measurement of the individual land and rent per annum. The summary of datasets used is as follows:

Detail plan at a scale of 1:1000

Attribute data

GPS Co-ordinates (Easting and Northing) of recent properties

4.2 Method

Developing a GIS application is more than simply buying or acquiring the appropriate software and hardware. In literature several strategies have been proposed to provide successful implementation. The implementation strategies adopted for this study are as follows: The acquisition of data (coordinates eastern and northern) using Global Positioning system (GPS) 12 XL (GERMIN).

Application domain analysis and requirement definition

Geodatabase Setup using Microsoft access 2003 ® Microsoft .Inc

Implementation of Graphic Interface to the database using ArcGis 9.2 ® Esri.

(See detail on the application architecture in figure 2) and subsequent discussion.

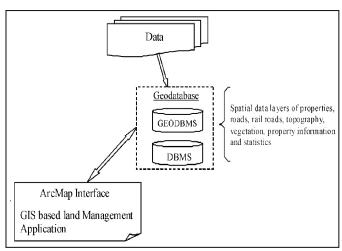


Figure 5.0: Application Architecture

Application domain analysis and requirement definition

Domain analysis involves the study of the entire area under consideration. In this case, the study is limited to the railway landed property within the Kaduna junction railway station. Feature analysis capture the spatial data within the study area such as roads, buildings, land area, heights etc. The user's requirement definition described the needs about geographic information management. The task was accomplished with the collaboration of RMCL staff.

Geodatabase setup

Geodatabase setup featured basically two components; database design and database construction. The output of domain analysis provided the required input for database design. This phase of database development/setup involved conceptual, logical and physical database design or modelling. To construct the database or implement the resulting design, a paper plan was scanned, geo-referenced (coordinates of each plot) and features of interest (tile to the plots) screen digitized. The features were digitized as thematic layers into a Geodatabase workspace using Arc catalog and ArcMap

Attribute Database

In order to ensure database integrity, database attribute fields, tables and table relationships were created in Microsoft access and exported to the Geodatabase in the

FEAL_ESTATE.BLOCK_ID 1	REAL_ESTATE.ADDRESS	REAL_ESTATE.HAME_OF_TENT	REAL_ESTATE.TYPE_OF_PROPERTY	REAL_ESTATEJUSE	REAL_ESTATE.Accommodati
31	STATION ROAD	NR WAKLIMAN	RESDENTIAL		3 BEDROOM FLAT I BLOCK A
32	STATION ROAD	ABOLAJI O L SOLADOYE	RESDENTIAL	RESIDENTIAL	2 bedrooms
33	STATION ROAD	JOHNSON A. OTOBO	RESDENTIAL	RESIDENTIAL.	3 BEDROOM FLAT I BLOCK A
34	STATION ROAD	MOHAMMED SAGEER	RESDENTIAL	RESIDENTIAL	BEOROOMFLAT I BLOCK A
35	STATION ROAD	FIDELS PAMDA	RESDENTIAL	RESIDENTIAL	3 BEDROOM FLAT I BLOCK A
36	STATION ROAD	UMAR MAI BORNO	RESDENTIAL	RESIDENTIAL	3 BEDROOM FLAT I BLOCK A
37	STATION ROAD	STEPHEN TOR	RESDENTIAL	RESIDENTIAL	EEDROOM FLAT I BLOCK B
33	STATION ROAD	TANMU A. O.	RESDENTIAL	RESIDENTIAL.	3 BEDROOM FLAT I BLOCK B
39	STATION ROAD	ZHRA PTCO	RESDENTIAL	RESIDENTIAL	3 BEDROOM FLAT I BLOCK B
40	STATION ROAD	ALH MUSA	RESDENTIAL	RESIDENTIAL	3 BEDROOM FLAT I BLOCK B
		II.			

Figure 3: Property attributes and relationship in Geodatabase.

Form of object classes. To attach information to feature classes, relationship classes were created for the object and feature classes Figure 3 is an example of a property table in the Geodatabase.

- Continuous Review: Once the process of assessing and identifying employees at all levels of the company has taken place, business owner should have a good idea of the depth and scope of available talent. The next most critical step is discipline. While succession planning can effectively guide identification, development and retention, the process breaks down if the data is not analysed, evaluated and updated continuously. One way to reinforce a consistent succession planning process is to tie a talent review process to performance reviews. This allows the business owner to piggy-back on an already-defined event and adds important insight: simultaneous measurement of current performance against a talent assessment helps validate decisions and planning for those employees whom the business owner feels will be of most value to the organisation. In fact, the business owner may not receive the full benefit of a performance review process if he/she does not take action to address gaps surfaced during the review and to develop the skills employees need to succeed in their current or future roles.
- c) Applying Technology: Designing, implementing, and executing an effective succession planning process can be time consuming and challenging. A paper-based system is not viable because there are simply too many variables to be assessed. Just

collecting and analysing data on its own to drive assessments for every employee alone is a massive undertaking. Once information is collected, keeping it current, centralised and easily accessible to key management staff with the right permission is very difficult when documents are kept in binders or file drawers throughout the organisation. Fortunately, there are innovative performance and talent management technology solutions available that dramatically facilitate the entire succession planning process. Applying technology allows business owner to have intuitive and easy to understand views of their team including readiness and risks of someone leaving - as well as greater access to successor candidate pools through flexible search tools. But this comprehensive view of a company's talent pool and bench strength is only possible using today's powerful technology designed especially for succession planning.

3.0 ROADMAP TO EFFECTIVE SUCCESSION PLANNING

As indicated by Rothwell (2007), a good succession planning program will be organized around a roadmap that integrates all its components and emphasizes the internal development of existing employees in the organisation. The chart below illustrates an example of a succession planning roadmap and step-by-step description of this roadmap; as proposed by Rothwell (op cit).

Key Steps to Effective Succession Planning Program



Source: Rothwell (2005a).

On this issue of business succession planning, Canada Business Network (2012) counselled on the need to contact key advisors such as Accountants, Bankers, Lawyers and Insurance broker when developing the succession plan and that communication with the potential successor(s) is important in order that they understand their roles in the business and collaborate in the transition process.

You must control your present to impact your future. The best way to predict the future is to create it. - Dr. Peter F. Drucker

2.0 ELEMENTS OF SUCCESSION PLANNING

There are two types of succession that can occur, a planned succession and an unplanned succession. When the transition is planned in advanced, the process can and should be a much smoother one. Using the succession chart below, a replacement should be identified and trained for the post. When taking over as the most senior manager in a company, the successor must understand what makes the business tick. He or she needs to understand all aspects of the business from sales and service to admin, cash flow and financials. If the successor does not have the ability to step into the entire role of the business owner, then he or she is not ready. An unplanned succession planning is another story entirely. A sudden need for replacement is usually due to a catastrophic event. In this case a plan needs to be worked out in advance that outlines the steps required to safeguard the company and keep things on track.

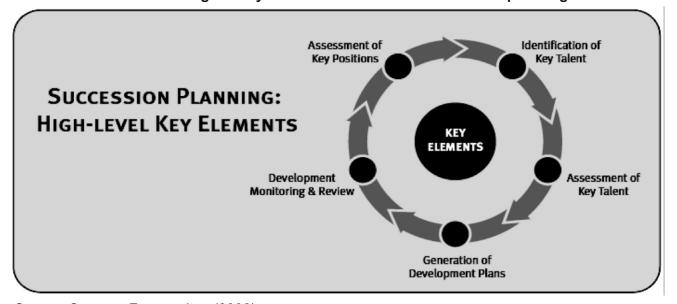
One element in succession planning often overlooked is the need for oversight. The business is most vulnerable in the event of an unplanned succession. If the owner or leader of the company is unable to work, the team can be left without the leadership needed to succeed. What if something is to happen to the

owner/founder of the company or one of the key managers or employees? These unplanned events could wreak havoc on the business. With no plan in place those left behind are left scrambling to come up with a plan. In many cases, this plan has simply been to sell the business or simply wind up the practice in case of real estate practice. Companies are gradually waking up to the fact that there are costs and pain associated with not having a succession planning strategy in place.

Success Factors, Inc. (2008) indicated that effective succession planning relies on three best practices, regardless of the industry in guestion. These best practices are as follows:

Define the Process: There are several key a) elements to designing a process that is both comprehensive and tailored to your company. The first step is the assessment of key positions. What are the roles in the company that are critical to the business? This is a thorough survey of key positions across the company. Once the key positions have been assessed, then the next step is to thoroughly assess the key talent in the company. Once these first two steps are completed, the business owner can begin to generate development plans for grooming individuals and strengthening his/her position in all the critical areas of the business. The focus is on the high potential employees and how to develop and retain them. It also allows the business owner to identify areas of improvement. Finally, creating a consistent, ongoing monitoring and review process is crucial to solid succession planning.

Chart illustrating the key elements for effective succession planning



database

Graphic user interface to a GIS database is necessary, to enable users understand and make use of the information and function provided by the system. For this study, interface to the database was implemented using Esri ArcMap®. ArcMap is a very robust module of ArcGIS® and supports a number of GIS functions required in land management.

5.0 APPLICATION AND RESULTS

The result of the application of GIS to land management is shown as follows.

Scenario one: An Estate Surveyor is looking for a location of property or properties whose rents review are due after three vears.

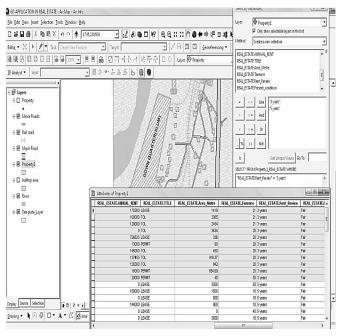


Figure 4: Properties whose rent reviews are due after three years.

By using an Interface (Arc Map) to the GIS application (Land Management for Railway Property Management Company Limited Kaduna area) with all the information (road access, water body, house availability, etc.) shown on the map, a property manager can quickly identify potential properties whose rent reviews are due after three years. Figure 6.0 above, shows selected properties whose rents are reviewed three yearly. Detailed information about the identified properties can also be obtained with an identity tool on the interface.

Application Interface/interface to the Scenario Two: A customer or an Estate Surveyor wants information about a property or some properties and some of his criteria are:

> Address of property Type of Property Area of property Use of Property

The information combined in GIS database system is a useful decision support tool for Estate Surveyors and valuers. On a GIS application map interface, a valuer can check land cover, land use, residential housing intensities and further on determine the trend of housing development. With the help of the database, the estate surveyor can input his own criteria for selecting potential properties of interest. Figure 6.1 illustrates selected properties (in light color) based on the criteria. This information product can enhance decision making process in property or land management.

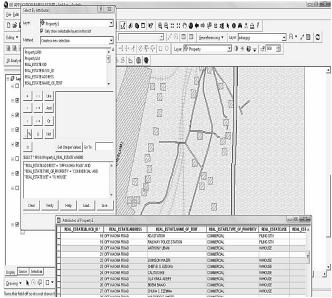


Figure 5: Properties selected based on an Estate Surveyor criteria.

Scenario Three: What is the range of rental value in the area? How many properties generate more than N100, 000.00 to the Company annually?

Using a guery builder, properties that generate more than N100,000.00 for the company can be identified. The information in Figure 6.2 shows that only 27 properties earn the Company more than N100,000.00 per annum and 61 properties fetch below this amount.

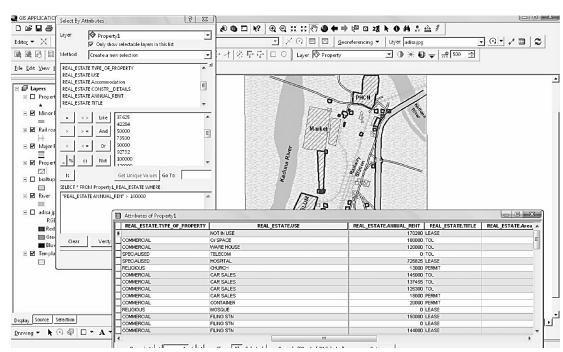


Figure 6: Properties that generate more than N100,000.000 for the company

Scenario four: An Estate Surveyor and valuer require detailed information about a particular property.

An estate surveyors and valuer can select a particular property of interest and have all the details of the property displayed in a window.

Also, more information such as house availability, house pictures, and house locations and so on can be examined using Arc Map. Figure 6.3 shows the property selected and the details of the property in a pop- out window.

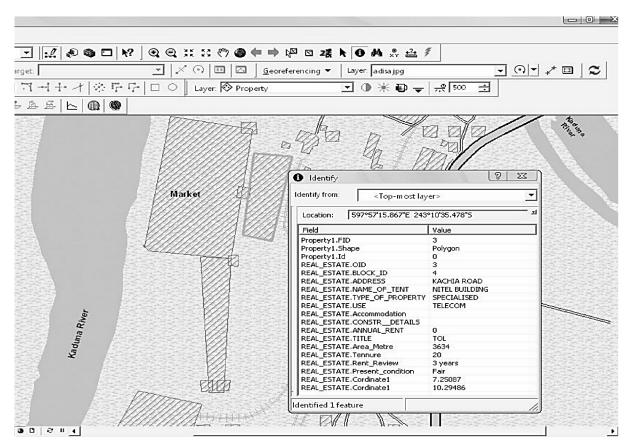


Figure 7: Details of a selected property in a pop-out window

Although succession planning is often confused with replacement planning, succession planning goes beyond replacement planning because its focus is broader than one position, department or division (Rothwell, 2005). It also differs from replacement planning because successors are considered by level on the organisation chart. Succession planning is an integral process that begins long before the outgoing leader departs, and it presents a remarkable opportunity to move forward with a new understanding of the complexities, challenges, and changes which the organisation must address. Succession planning is therefore the preparation to replace one leader with another (Mamprin, 2002). Succession planning is usually based on the assumptions that (Rothwell, 2007):

A goal is to identify a talent pool of many people who are willing to be considered for promotion and work to be developed for it.

The future may not be like the past, and the competencies required at each level may be different in the future so that merely "cloning" past leaders is not appropriate.

Development occurs primarily on the job rather than by off-the-job training experiences.

It can be said that the ultimate goal of leaders is to work themselves out of their jobs. Effective leaders plan an exit that is as positive and graceful as their entrance was. They come to the job committed to the mission and goals of the organisation and to their personal goals. When those goals are realized, the transition to new leadership becomes a primary focus. An excellent successor becomes, literally, the ultimate leadership responsibility.

The most obvious reason for having a succession plan is to provide for a dealership owner's transition into retirement. Because of this, many people have a tendency to confuse succession planning with exit strategy planning. However, there are other reasons for succession plans in a company. The focus of this paper is to provide some insight into why succession planning is so important and to outline a plan that can be followed to create a succession plan that will provide a positive outcome.

1.1 Why plan for business succession?

Effectively done, succession planning is critical to mission success and creates an effective process for recognizing, developing, and retaining top leadership talent. According to Canada Business Network (2012), a good business succession plan will help make the transfer of business to go smoothly, and allow the business owner to maintain good relationships with employees and other business partners. Thus, succession planning helps the business owner to:

Protect the legacy of his/her business

Maintain a service for the community

Build value for the business

Provide financial security for his/her family and other stakeholders

Deal with unexpected events (illness, accident or death)

Prepare for the future

Furthermore, Canada Business Network (2012) indicated that business succession plan can help business owner make important decisions about ownership, maximizing his/her company's value, tax matters and that such plan should touch on some of the following areas:

Goals and objectives

- * Develop a vision for the business.
- * Determine your retirement or post business ownership goals.

Decision making

- * If appropriate, involve family members in the development of the plan.
- Have a conflict resolution mechanism a preestablished plan to resolve any conflicts between family members, partners and/or employees.
- * Select a successor.

Training

- * Identify the core skills and competencies that the potential successor will need.
- * Plan for the training of the new owner(s).

Estate planning

Prepare a financial plan and determine the tax implications of the transition of the business.

Contingency planning

* Have a contingency plan that includes the financial resources required to ensure the survival of the business in case of illness, accidents and even death.

Corporate structure and transfer methods

- * Determine available options as a sole proprietor, partner or owner of a corporation.
- * Decide whether the business owner wish to transfer or sell the business to the potential successor.

Business valuation

* Find out the fair market value of the business.

Exit strategy

* Establish a timeline for easing his/her way out of the business.

Implementation and follow up

Review and update his/her plan regularly.

STEPS TO EFFECTIVE SUCCESSION PLANNING: **ENSURING LEADERSHIP CONTINUITY IN REAL ESTATE FIRMS**

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ABSTRACT

Succession planning involves transferring ownership and control of a business to new management; it is a systematic, proactive human resources approach to ensure leadership continuity, developing potential successors in ways that best fit their strengths, identifying the best candidates for categories of positions and concentrating resources on the talent development process in order to avoid declines in production or disruptions to business flow when the business owner/founder retires or dies. In Nigeria, many professional estate firms have had to close down because there is no credible and competent successor to carry on the business activities after the business owner retires or dies; this should not have been so. The preparation to concede ownership of a business can be tough for owner-managers, but getting it right is crucial if the business is to remain operational and successful. This is the focus of this paper. Key issues elaborately discussed include roadmap to effective succession planning in professional service firms, choosing a business successor and succession planning best practices among others.

1.0 INTRODUCTION

Succession is the assumption of a position or title, the right to take up a position or title, or the order in which a position or title is taken up. According to Webster Dictionary, succession is the act of succeeding or coming after another in order or sequence or to an office, estate, throne, etc. So, while succession is the "act" of replacing someone in the business, the actual replacement can, and has been done with varying level of success. Planning is a system for achieving an objective; a method of doing something that is worked out in advance. Planning is to work out how to do something; or to work out in advance how something is to be done or organised.

Succession planning is a means of identifying critical management positions (Carter, 1986); a process for identifying and developing potential future leaders or successors, as well as individuals to fill other business-critical positions, either in the short or the long-term (CIPD, 2012). As defined in Wikipedia (n.d.), succession planning is a process for identifying and developing internal people with the potential to fill key leadership positions in the company. Succession planning, sometimes called succession management to emphasize the active and continuous nature of the effort is a process for preparing people to meet an organisation's needs for talent over time. Rothwell (n.d.) defined succession planning as any effort designed to ensure the continued and effective performance of an organisation, division, department, or work group by making provision for the development, replacement, and strategic application of key people over time. Russo & Mitchell

(2005) in the American Society for Training & Development (2010) defined succession planning as the process of identifying key positions, candidates or the employees needed to meet the challenges that an organisation faces in the short term and in the long term. As Robert and Turknett (n.d.) put it, succession planning is a systematic process designed to:

> identify key leadership positions and hard-to-fill positions;

> identify the critical competencies that employees in those positions require; and prepare for their replacement to ensure the continued ability of an organisation to meet its strategic goals and supporting objectives.

Succession planning does not exist in isolation. It is interwoven with the organisation's strategic objectives and should reflect the way the company needs to evolve in order to achieve its strategic goals. This means that the kinds of leadership styles, skills, and behaviours to be developed and promote might be different in the future from those in the existing culture. Current conditions consist of the rapid growth of emerging technologies, a demand for more public accountability, heightened expectations by company members, fierce competition (including time competition), and the stewardship of sustainable growth and value, to mention a few. What do these trends and changes mean for the type of leadership that will be required for the organisation to succeed in such a "new world?"

By exploring property information in the GIS system before actually going out to look at the houses, both property manager and customers can benefit from it. This is not only a great tool for the property manager but also for the customers as well. Besides listing detailed property information, the query output can help user to locate the following.

The location of the property. Size of the property. The dimension and the floor plan. Budget and expected property values over a period of time. Amenities offered

6.0 CONCLUSION

Land, a very basic human resource, can hardly be renewed without adverse effect and must. therefore, be judiciously and efficiently managed. Thus the system of ordering its effective utilization Root, E. F (1985), Survey and Mapping to Aid cannot, therefore, be ignored in this era of information technology or revolution. The available plans and estate record in most government establishment are in analogue system, voluminous and outdated. The need to improve this system is imperative in the present global village. Nigeria is not isolated from the necessity to collaborate in worldwide research involving the application of Geographical Information System in many developed and developing nations. It has been established by this study that the application of GIS to property or land management in government establishments would bring about easy access to land information, prevent conflicts of interest, reduce the bureaucracy in title processing, improve revenue generation and ensure efficient service delivery.

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A PHENOMENOLOGICAL APPROACH TO VALUING CONTAMINATED FARMLANDS IN NIGERIA

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ABSTRACT

The payment of fair, adequate, equitable and full compensation to agricultural land owners or occupiers, could serve as a deterrent to continued indiscriminate land pollution by industry and individuals globally. This research paper examines the perceived impact of oil pollution on agricultural land yields and suggests methodologies for a comprehensive assessment and appraisal of the loss of agricultural income to land owners arising from the contamination. It examines the process of valuation of contaminated land, conducts empirical phenomenological research and hypothesizes that a combination of scientific and qualitative research methodologies could form a basis for the recommendations on good practices in compensation assessment. It recommends that the value of compensation determined in a particular context has a relationship with the prevailing land-use pattern and that adopting a single-method approach to valuation for compensation in cases of oil pollution, is not sustainable. It also recommends a combination of alternative approaches as each particular land pollution situation demands.

Keywords: Environmental impact assessment, compensation; contaminated land; oil spills, statutory valuation.

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INTRODUCTION

Contaminated land has been defined variously with each definition having an impact on land users in different ways. Warren (2001) defines contaminated land as any land that contains a substance or substances that may adversely affect people or the environment. In the UK Environmental Protection Act 1990, s.78A (2), contaminated land is defined as

"any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that (a) significant harm is being caused or there is a significant possibility of such harm being caused."

Harm is further defined within the context of agricultural property in s. 78A (2)(a)(iii) as

"death, disease, other physical damage to livestock, crops, produce or domesticated or wild animals subject to hunting rights, amounting to 20% or more of their value (an animal or crop) effect".

In reality, meaning can only be ascribed to contaminated land within a particular context linked directly to the land use and as such, what may be regarded as contamination to an agricultural land user may be insignificant for an industrial heavyduty truck park. Again, contaminated land examined within the context of the environment has a different level of emphasis from contaminated land resulting in damage to personal property which has to be compensated for, in full by the perpetrators. In one context, the focus is on our common resource the environment while in the other; the focus is on loss of income resulting from the presence of contamination to a property owner. This paper focuses on loss of income as perceived by local farmers suffering the impact of oil pollution in the Niger delta, and not only on the impact on the environment as a rich resource.

In the UK, the government in its white paper of 1

5.0 FINDINGS

The overall level of understanding of the students in the classification of plant and machinery assets is higher than that in any other topic while the students' overall level of understanding was lowest in computer applications in plant and machinery valuation. Majority of the students strongly hold the opinion that plant and machinery valuation has high practical content and should be taught with practical exercises. They strongly agreed that practical exercises in the field will facilitate understanding of plant and machinery valuation. Other opinions agreed by the students include that more time should be devoted to practical plant and machinery exercises in the field than lectures in the classroom, lecturers with practical experience teach plant and machinery valuation better, students should be given real live problems in plant and machinery valuation to solve in the classroom and only lecturers with a minimum of Masters degree and professional qualifications should teach plant and machinery valuation. However, the students disagreed that plant and machinery valuation is difficult to understand. Also, although there are differences in the level of understanding of the basic topics in plant and machinery valuation between the male and female students, such differences are not significant statistically.

7.0 CONCLUSION

In order to achieve effective education and training of plant and machinery valuers for the Nigerian valuation industry in particular, and economic development of the country in general, there is an urgent need to inculcate more practical and field exercises into the curriculum of plant and machinery valuation course in tertiary institutions offering this course in the Nigerian educational system. This will in no small measure facilitate students' understanding of the basic topics in plant and machinery valuation. As a matter of policy, the Federal Government should build capacity in plant and machinery valuation education to develop high level manpower for the teaching of plant and machinery valuation in the polytechnics and universities in the country, given the relevance of plant and machinery valuation in the industrial development of Nigeria. Such initiative should be anchored on effective collaboration between the academia and experienced practitioners in the Nigerian valuation industry.

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Table 5: Respondents' Consensus Opinion on the Teaching and Learning of Plant and Machinery Valuation in the University

Opinion		Mean		Respondents'	Relative	Rank
•	Male	Female	All	Consensus Opinion	Importance Index	
Plant and machinery valuation has high practical content and should be taught with practical exercises	4.66	4.68	4.67	Strongly Agree	0.93	1
Quantitative skills are necessary for solving plant and machinery valuation problems	4.38	4.48	4.41	Agree	0.88	3
Practical exercises in the field will facilitate understanding of plant and machinery valuation	4.70	4.45	4.61	Strongly Agree	0.92	2
More time should be devoted to practical plant and machinery exercises in the field than lectures in the classroom	3.82	3.79	3.81	Agree	0.76	7
Most examples in plant and machinery valuation given by lecturers in the classroom are abstract	2.80	3.25	2.97	Undecided	0.59	8
Plant and machinery valuation is difficult to understand	2.27	2.45	2.34	Disagree	0.47	9
Lecturers with practical experience teach plant and machinery valuation better	4.36	4.12	4.27	Agree	0.85	4
Students should be given real live problems in plant and machinery valuation to solve in the classroom	4.39	4.03	4.26	Agree	0.85	4
Only lecturers with a minimum of Masters degree and professional qualifications should teach plant and machinery valuation	3.84	4.26	4.00	Agree	0.80	6

Source: Computed from Data in Table 3

Table 6: Result of the Analysis of Variance in the level of understanding of the basic topics in plant and machinery valuation between the male and female respondents under study

Source of variation	Sum squa	res DF	Mean squa	are F statistic	р
Groups	0.096	1	0.096	0.39	0.5372
Residual	8.903	36	0.247		
Total	8.999	37			

Source: Computed from Data in Table 2

September 1990 commented on the inherent difficulties in dealing with contaminated land as follows: "contamination of land by chemicals and waste products is hard to define and measure exactly". Issues dealing with contaminated land appear to continually focus on contamination in relation to human and environmental health vis-àvis the costs/benefits of clean-up and remediation to make the land, suitable for a particular use and nothing else. The understanding behind the logic may be attributed to an understanding that contaminated land resulting from years of industrial activity is a price to be paid for collectively but the future will see wiser use of this environmental resource. The Guidance to the contaminated land provisions in the 1990 Act in the UK, states that the Government objectives in this regard, underlie the "suitable for use" approach to remediation which is composed or 3 elements as follows:

Ensuring that the land is suitable for its current purpose

Ensuring that the land is made suitable for any new permitted use

Limiting the requirements for remediation to the work necessary to prevent unacceptable risk to human health or the environment in relation to the current use or officially permitted future use of the land.

The Guidance notes however, provide for complete removal of the contamination where it has resulted from a breach of an environmental license or permit, as a deterrent to prevent new contamination. By reviewing all three elements mentioned above within the context of contamination of agricultural lands, the "suitable for use" principle associated with remediation does not capture the time interval between contamination and restoration to make the land suitable for agricultural use in the future. The interval comes at a cost to agricultural profits and should be assessed.

VALUATION FOR COMPENSATION IN NIGERIA

The Estate Surveyors and Valuers (Registration ETC) Act, CAP E13 LFN 2004, and the Rules and Regulations made under the Act, states that only Registered Estate Surveyors and Valuers can determine or estimate value of any or all interests in all types of property in Nigeria. This includes valuation for all purposes ranging from sale or rental value to compensation value following compulsory acquisition or damage due to pollution. The Land Use Act, Cap L5 LFN 2004 also makes provision for the methods of valuation to be as approved by the "appropriate officer" usually the Chief Lands Officer in the State.

The statutory basis for the assessment of compensation in Nigeria is outlined in various statutes which govern compensation that is as a result of compulsory acquisition or compensation resulting from pollution and damage to property. The Land Use Act, Cap L5 LFN 2004 is the primary statute guiding the practice of compensation assessment which not only defines the basis of assessment and method, but also describes the office that is responsible for decisions on the methods to be used. In the extractive industries, legislation such as the Petroleum Act Cap P10 LFN 2004; the Nigerian National Petroleum Corporation (NNPC) Act Chapter 320 LFN 1990; the Oil Pipelines Act Act Cap 07 LFN 2004 all make provision for compensation due to damage property arising from the execution of licences and permits. The Oil Pipelines Act Cap 07 LFN 2004 s.20(5) states that "in determining compensation in accordance with the provisions of this section, the court shall apply the provisions of the Land Use Act so far as they are applicable and not in conflict with anything in this Act as if the land or interests concerned where land or interest acquired by the President for a public purpose. Again the Oil Pipelines Act specifies that the methods of assessment should adhere to those contained in the Land Use Act.

Mineral and Mining ACT Cap M12 L.F.N. 2004 s.227(1) provides that in addition to any reimbursement payable to the Federal Government, the holder of a lease or licence shall pay to the owner or occupier of any land within the area of the lease or licence, compensation for any crop, economic tree, building or work damaged, removed or destroyed by the holder of the lease or licence or by his agent or servant. The statutes are all intricately woven together and can be interpreted together in order for a complete picture in the absence of a compensation code in the country. The assessment of Petroleum related compensation under the Land Use Act provides for all such assessments are to be based on the provisions of the Petroleum Act which does not provide any method of assessment.

Compensation under the Land Use Act, is "for an amount equal to the rent, if any, paid by the occupier during the year in which the right of occupying was revoked" referring to compulsory acquisition and not damage. In the assessment of crops s.29(4)(c) the Land Use Act, provides for the assessment of crops "for an amount equal to the value *prescribed* and determine by the appropriate officer". In the absence of a regulatory compensation code for normative patterns have developed over the years and from case laws.

VALUATION OF CONTAMINATED LAND

There is a strong body of literature on contaminated land valuation and several authors have addressed the subject of contaminated land valuation from different perspectives. Syms and Weber (2003), note that the presence of contamination in land can affect not only the value of the land but render it unsalable in normal markets and un-mortgageable. They also agree that the more information available to valuers, the greater the accuracy of their valuation as ultimately, the report should describe the information on which it is based. Dixon (1995) and Richards (1996), are of the opinion that the environmental risk must first of all be assessed prior to valuation of contaminated land. They suggest that the traditional investment valuation methods should serve as the framework for this sort of valuation following an assessment of the direct costs; indirect costs; and property factors affected by the contamination. They address the stigma associated with contaminated land valuation.

Catney et al in Dixon et al (2007), outline that within the context of the United Kingdom, contaminated land is framed primarily within the context of 'economic terms' particularly where it forms an obstacle to economic progress and urban development or re-development. The context within which contaminated land is assessed is to minimize peri-urban blight, protect economic interests and harness market led development processes to restore contaminated land to productive use. Dixon and Richards (2003) discuss that in the UK, the issue of contaminated land is viewed to the extent in which it serves as a hindrance to development and not necessarily as a critical environmental or health concern and that valuation methodologies follow after this underlying framework to a large extent. This position however contradicts with the provision of the 1990 Act. The responsibility of ensuring that the land is 'suitable for use' rests with the potential investor and as such valuation methodology focuses on capturing as much detail as possible, on the assessment of all the likely costs associated with making the land suitable for use within an investment framework.

Syms (1995, 1996, 1999); Syms and Weber (2003); Dixon and Richards (2003); Patchin (1991); Lizieri (1995); discuss the issue of stigma within the context of impaired property and the valuation of contaminated land. Patchin (1991), explored the potential negative effect on market value of the stigma attached to contaminated properties after all cleanup costs and related tangible factors have been considered. Their discussions focused on residential and commercial property and not agricultural property as this paper suggests.

Patchin (1994), discussed the issue of 'contaminated property' and environmentally impaired property transactions. The thrust of this discussion is in the application of a comparable sales approach and the measurement of losses resulting from contamination through the analysis of market data on contaminated properties. The issue of uncertainty in the valuation of undeveloped contaminated land has also been addressed by

Weber (1997) who discusses how the presence of contamination might alter the highest and best use of undeveloped land. Noting that the valuation of contaminated land can be among the most challenging appraisal assignments requiring the appraiser to have a number of typical skills and good understanding of the environmental assessment and remediation processes. He considered the relative financial risks of contaminated sites by performing risk analysis on comparable sites.

Schoenbaum (2002), examines the assumption that pollution systematically affects land use and development which had earlier been identified in Schoenbaum (2000), as an assumption underlying brownfields legislation in the study area.

The International Valuation Standards Committee guidance notes on the valuation of agricultural properties recognize the value of agricultural lands and sets out the basis of valuation of such properties. It does not however address specific methods for use within the context of contaminated land but it is assumed that this can be considered following the extent to which the contamination influences the cash flow pattern which is the focus of the proposed study. Syms (1996) discussed the 'risk assessment' approach to valuation of contaminated land which dwells on calculating and determining the unimpaired value of a property and deducting from it all discounted costs of remediation and arriving at the impaired value. This approach also included the effect of stigma on the impaired value.

Richard (1996), considered 'best practice' approaches which Valuers can use to produce open market valuation of contaminated land and property. The study focused on reversionary freehold investment properties and the determination of the types of valuation approach actually being utilized by the profession in order to test if the "cost to correct" approach was applicable or not. The paper notes that contamination can hold different value implications for different end users and where the end or current user is for agricultural purposes such as farmlands, the valuation requires special consideration with particular focus on soil quality. The study focused on how different types of

RESULTS AND DISCUSSION

The respondents performed better in the classification of plant and machinery assets than in any other topic based on the mean of the respondents' responses on their level of understanding of the basic topics in plant and machinery valuation as presented in Table 4. Also, the respondents' overall level of understanding was lowest in computer applications in plant and machinery valuation than in any other topic. Respondents strongly agreed that plant and machinery valuation has high practical content and should be taught with practical exercises. This opinion was ranked first by the respondents with a RII of 0.93 as presented in Table 5. Similarly, respondents also strongly agreed that practical exercises in the field will facilitate understanding of plant and machinery valuation .This opinion was ranked second by the respondents with a RII of 0.92. In terms of the consensus opinion, the respondents agreed on all the opinions, but disagreed that plant and machinery valuation is

difficult to understand. This opinion was ranked last by the respondents with a RII of 0.47. Analysis of Variance (ANOVA) in the level of understanding of the basic topics in plant and machinery valuation between the male and female respondents produced an F-ratio of 0.39 at p-value greater than 0.05 as presented in Table 6. This implies that although there are differences in the level of understanding of the basic topics in plant and machinery valuation between the male and female respondents, such differences are not significant statistically. The correlation analysis of opinions of male and female respondents regarding the teaching and learning of plant and machinery valuation in the University produced a strong positive correlation coefficient of 0.82 at p-value less than 0.05. This was found to be significant at both 0.05 and 0.01 levels as the p-value is 0.0072 (2-tailed). The implication of this is that, the male and female respondents under study relate significantly in their opinions regarding the teaching and learning of plant and machinery valuation in the University

Table 4: Respondents' Overall Level of Understanding of the Basic **Plant and Machinery Valuation** Topics in

	Moon							
Basic Topics		Mean						
	Male	Female	All					
Definition of plant, machinery and equipment	4.38	4.26	4.33					
Classification of plant and machinery	4.30	4.53	4.39					
Basis, methods and purposes of plant and machinery valuation	4.09	3.81	3.99					
Industrial Revolution	3.09	2.73	2.95					
Evolution of plant and machinery valuation	3.15	2.91	3.06					
Categories of plant and machinery valuation	3.51	4.03	4.08					
Insurance valuation of plant and machinery	3.95	3.85	3.91					
Compilation of plant and machinery inventory	3.72	3.59	3.67					
Methods of Depreciation of plant and machinery assets	3.91	3.75	3.85					
Determination of insurable value of plant and machinery on the basis of reinstatement with new	3.89	3.94	3.91					
Determination of insurable value of plant and machinery on the basis of indemnity	3.96	3.79	3.90					
Capitalisation of incomes from plant and machinery assets	3.15	3.00	3.09					
Valuation of plant and machinery for compulsory acquisition and compensation	3.09	3.06	3.07					
Valuation of plant and machinery forming part of a continuing business	3.68	3.53	3.62					
Determination of Net Current Replacement Cost of plant and machinery	3.65	3.50	3.60					
Indexing of plant and machinery	3.46	3.31	3.41					
Sources of cost information for plant and machinery valuation	3.95	3.55	3.80					
Computer applications in plant and machinery valuation	2.55	2.47	2.52					
Plant and Machinery Valuation Report	3.65	3.61	3.64					
Source: Computed from Data in 7	able 2							

Table 3: Respondents' Opinions on the Teaching and Learning of Plant and Machinery Valuation in the University

Opinion	Respondents' Responses															
	Stron Agr		У	Agree			Undecided				Disagree			Strongly Disagree		
	M	F	All	M	F	All	M	F	All	M	F	All	M	F	All	
Plant and machinery valuation has high practical content and should be taught with practical exercises	37	24	61	19	9	28	-	1	1	-	-	-	-	-	-	
Quantitative skills are necessary for solving plant and machinery valuation problems	23	15	38	31	16	47	2		2	-	-	·	-	-	-	
Practical exercises in the field will facilitate understanding of plant and machinery valuation	42	18	60	11	13	24	3	1	4	-	1	1	-	-	-	
More time should be devoted to practical plant and machinery exercises in the field than lectures in the classroom	16	6	22	22	19	41	10	3	13	8	5	13	-	-	-	
Most examples in plant and machinery valuation given by lecturers in the classroom are abstract	5	6	11	13	8	21	11	7	18	20	10	30	7	1	8	
Plant and machinery valuation is difficult to understand	3	-	3	6	5	11	1	8	9	39	17	56	7	3	10	

Note: M= Male Respondents' Responses; F= Female Respondents' Responses; All= Responses of all Respondents

Source: Field Survey (2011)

Table 3 Continued: Respondents' Opinions on the Teaching and Learning of Plant and Machinery

Valuation in the University

Opinion	Respondents' Responses														
		Strongly Agree	/	Agree		Undecided		Disagree			Strongly Disagree		•		
	M	F	All	M	F	All	M	F	All	M	F	All	M	F	All
Lecturers with practical experience teach plant and machinery valuation better	25	13	38	27	14	41	3	5	8	1	2	3	-	-	-
Students should be given real live problems in plant and machinery valuation to solve in the classroom	23	11	34	32	17	49	1	2	3	-	4	4	-	-	-
Only lecturers with a minimum of Masters degree andprofessional qualifications should teach plant and machinery valuation	20	15	35	19	15	34	6	2	8	10	2	12	1	-	1

Note: M= Male Respondents' Responses; F= Female Respondents' Responses; All= Responses of all

Respondents

Source: Field Survey (2011)

property with different types of contamination could be valued with special focus on reversionary freehold office investment affected by nonmigratory heavy metal contamination and concludes that the "cost to correct" approach could be incorporated within a discounted cash flow framework.

Bond and Kennedy (2000) reviewed the legislative framework surrounding contaminated sited in the UK and New Zealand. Bond (1997), had earlier outlined areas were legislation may be unclear and a source of confusion to valuers. Their study focused on the approaches used by valuers when valuing contaminated property that account for the risk associated with such property. The findings of the study highlight the technical weaknesses inherent in valuation methods applied to contaminated sites and indicate that there is the need for more quantitative approaches to the calculations. It suggests that a more analytical and quantitatively sophisticated approach to valuation should be adopted. Bond et al. (2001) examined the issue of how valuers account for the financial risks associated with investing in land and property affected by contamination and concludes that whatever method that is adopted in valuation of contaminated land, some variant of income capitalization analysis is necessary to measure the deductions from unimpaired market value that are appropriate and necessary to estimate market value "as is" of contaminated land.

From the preliminary review, the subject of contaminated land valuation is a growing area of research and there is room for further research on both national and global scales. Most of the authors based their discussions on a framework which does not specifically address compensation but rather from an investment analysis perspective. They also focus on commercial and residential type developments and not on agricultural properties, as this paper suggests. The valuation of contaminated land is also not explicitly linked with statutory valuation in any of the papers reviewed which is the thrust of this paper. The general idea is that contamination of land with any substance can hold different value implications for different end users. This paper focuses on oil pollution and agricultural land use. To this end, the valuation requires special consideration with particular focus on the effect of the contamination on soil quality and crop yield.

METHODOLOGY

A phenomenological case-study research design formed the basis of data collection and analysis because it is a useful tool for investigating trends and specific situations in many scientific disciplines which enables in-depth study of a particular situation rather than a sweeping generalizations from documented research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships and is is able to narrow down a very broad field of research into one easily researchable topic. Kakulu et al. (2009), discuss phenomenology as suitable research methodology which utilizes participant experiences and perceptions of a particular phenomena as a rich data source which can be triangulated with other sources of data to yield credible findings. Building on the application of this diagnostic research methodology, a study was conducted applying the principles and underlying philosophies that reality is subjective and multiple.

The methodology recognizes that human experience makes sense to those who experience a particular phenomenon. Primary data was obtained from documented literature on the subject and empirical data through the administration of semistructured questionnaires to several farmers as a complimentary to the United Nations Environment EIA project in the Nigeria in 2010. Phenomenological research attempts to understand empirical matters from the perspectives of the participants. This study however, employs a combination of qualitative and quantitative methods, and does not rely solely on interviews which might be interpreted as subjective and biased responses from the interviewees.

Questionnaire Survey

Questionnaires were administered to 782 farmers in 4 local government areas in Nigeria not for the purpose of generalizing the findings but for illustrative purposes on the perceptions and expectations of peasant farmers in oil related pollution involving their farmlands. The questionnaires were administered over a period of 3 months by a team of interviewers. Sample selection was based on a random sampling approach within each community and the GPS location of each interview was recorded and mapped showing a reasonable spread of respondents from the each community. Households were selected using intervals of every 5th to 10th household in each community, an average of over 15% sample size per community was achieved.

Farming Practices of Respondents

A total of 782 farmers were interviewed and the findings revealed that the predominant pattern of subsistence farming practiced in the area is manual and labour intensive using traditional farming implements such as hoes and machetes.

Farmers generally have access to and farm on plot sizes ranging from 450m² to 3000m². Approximately sixty percent of the farmers had access to over 900m2 of farmland available to them during any farming season following the communal land tenure systems obtainable in the area. The farming practices are mainly subsistence as they farm within a radius of not more than about 5km from their residences accessing their farms by walking, cycling or the use of motorcycles. About sixty percent of the farmers walk to their farms on a daily basis and about sixty-five percent of them are able to cultivate all their farming portions during each farming season while the remaining thirty-five percent are able to farm on only half of the land available to them in each planting season.

Farmers' responses indicate that in eighty-one percent of the cases, they practice mixed cropping in which the entire 450m² to 900m²plot is densely covered with several species of cash crops and forestry products. Nine percent of the farmers practice single cropping while the remaining ten percent of the farmers grow between two to four types of crops annually on their farm plots. The main purpose of farming is for consumption purposes and over fifty-one percent of those interviewed consume their farm products followed by forty-five percent who both consume and sell their farm products. The proportion of those produce for sale only or exchange by barter, is less than three percent. Sixty-three percent of farmers indicate that they employ the use of fertilizers; forty-nine percent do not use any fertilizer while the remaining respondents gave no response to this particular question.

Farmers perception of oil pollution impact on farmlands

Approximately thirty-eight percent of the farmers interviewed indicated that they had changed farming locations in the past for a number of reasons including oil pollution to their farms. However, the distances from their previous farm locations to the new farms indicates that there is no real change in terms of farming radius from their residences which is usually between 2km and 5km as mentioned earlier. Over 60 percent of the farmers indicate that they have continued to farm in the same locations despite oil pollution in and around their farming fields. Respondents indicated that farming rotation; loss of fertility; and oil pollution were the main reasons for the change in their farming locations, while a few of them mentioned road construction and housing development in isolated cases. See table 1 below.

Table 1 Reasons for relocation of farmlands

Reason	Percentage
Oil Pollution	17.6
Farming Rotation	53.6
Loss in soil fertility	26.4
Road and housing construction	2.4

In terms of plant health following oil pollution, by using simple and understandable parameters such as changes in flowering patterns; change in yield; observed less vigorous plant growth; and the yellowing of leaves, approximately 70 percent of the respondents, indicated that the crop yield was low following spills, 18 percent of them indicated that it was average while the remaining 12 percent were of the opinion that crop yield was still high.

Table 2 Reasons for relocation	of farmlands
Crop yield following pollution	Percentage
High	12
Medium	18
Low	70

In keeping with the phenomenological research methodology, and to enable the study determine if there were other external and remote factors contributing to respondents' perceptions of their losses, respondents were allowed to comment freely on all perceived and actual constraints they face in the area of farming and crop production. This was done through open ended questions which were analyzed and summarized in the table below.

Table 3 respondents comments on farming challenges

Challenges faced by farmers Unsuitable land Insect Pests	Percentage 31.6 25.8
Lack of access to sufficient	
land for farming	12.7
Oil spill / environmental pollution	15.1
Lack of finance	8.9
Poor yield	4.2
Climate change	0.7
Dizziness while farming	0.2
Other pests (goats)	1

VALUING CONTAMINATED FARMLANDS

Following the analysis of information provided by the farmers during the interviews, the following conclusions can be drawn from their perceptions which can influence statutory processes for performing valuation for compensation. The main considerations in approaching this type of valuation as the study has shown, should be a clear understanding as to how to determine and place

Table 2: Respondents' Responses on their Level of Understanding of the Basic Topics in Plant and Machinery Valuation

Basic Topics	Level of Understanding														
	Very Good			Good		Fair		Poor			Very Poor				
	М	F	All	М	F	All	М	F	All	М	F	All	М	F	A
Definition of plant, machinery and equipment	22	11	33	33	21	54	1	2	3	-	-	-	-	-	-
Classification of plant and machinery	20	18	38	29	16	45	4	-	4	-	-	-	-	-	-
Basis, methods and purposes of plant and machinery valuation	17	6	23	27	15	42	12	8	20	-	2	2	-	-	-
Industrial Revolution	2	1	3	11	4	15	31	16	47	10	9	19	-	3	3
Evolution of plant and machinery valuation	2	2	4	14	4	18	30	19	49	8	5	13	1	3	4
Categories of plant and machinery valuation	14	4	18	33	24	57	8	3	11	-	-	-	-	-	-
Insurance valuation of plant and machinery	12	4	16	28	20	48	15	9	24	-	-	-	-	-	-
Compilation of plant and machinery inventory	7	5	12	27	10	37	18	16	34	2	1	3	- ·		-
Methods of Depreciation of plant and machinery assets	12	4	16	27	16	43	17	12	29	-	-	-	-	-	-
Determination of insurable value of plant and machinery on the basis of reinstatement with new	13	7	20	24	18	42	19	9	28	-	-	-	<u>-</u>	-	-
Determination of insurable value of plant and machinery on the basis of indemnity	15	7	22	24	15	39	17	10	27	-	2	2	-	-	-
Capitalisation of incomes from plant and machinery assets	2	-	2	11	7	18	35	17	52	5	7	12	1	-	1
Valuation of plant and machinery for compulsory acquisition and compensation	2	2	4	18	5	23	23	19	42	6	5	11	6	1	7
Valuation of plant and machinery forming part of a continuing business	6	4	10	28	11	39	20	18	38	2	1	3	-		-
Determination of Net Current Replacement Cost of plant and machinery	8	4	12	22	11	33	23	18	41	2	-	2	-	1	1
Indexing of Replacement cost of plant and machinery assets	6	1	7	17	13	30	27	13	40	4	5	9	-	-	-
Sources of cost information for plant and machinery valuation	16	5	21	22	13	35	15	10	25	2	5	7	-	-	-
Computer applications in plant and machinery valuation	1	1	2	6	4	10	21	9	30	15	10	25	8	6	14
Plant and Machinery Valuation Report	9	2	11	19	16	35	26	15	41	1	-	1	-	-	-

Note: M= Male Respondents' Responses; F= Female Respondents' Responses; All= Responses of all Respondents

Source: Field Survey (2011)

3.0 METHODOLOGY AND DATA

Data for the study were obtained through structured questionnaires. A total of 104 structured questionnaires were administered to 500-level Bachelor of Technology (B.Tech) Degree students in the Department of Estate Management and Valuation, Federal University of Technology, Minna, Niger State, Nigeria, selected through purposive sampling technique, out of which 90 were properly completed and returned, representing a response rate of 86.5%. These students were selected because they have been taught plant and machinery valuation as a course for a whole semester. Data collected for the study include the demographic characteristics of the respondents as presented in Table1, respondents' opinions regarding their level of understanding of the basic topics in plant and machinery valuation as well as their opinions on the teaching and learning of plant and machinery valuation in the University as presented in Tables 2 and 3 respectively, among others. A5-point Likert scale was used to determine the mean of the respondents' responses for each of the opinions. The respondents' opinions regarding their level of understanding of the basic topics in plant and machinery valuation were analysed to determine their overall level of understanding. The

points attached to the respondents' level of understanding are: Very Good (5); Good (4); Fair (3); Poor (2) and Very Poor (1). Also, their opinions on the teaching and learning of plant and machinery valuation in the University were analysed to determine their consensus opinion and rank based on the respondents' mean response and Relative Importance Index (RII) respectively. Similarly, the weights attached to the respondents' opinions on the teaching and learning of plant and machinery valuation in the University are: Strongly Agree (5); Agree (4); Undecided (3); Disagree (2) and strongly Disagree (1). In the ranking of the opinions, the opinion with the highest RII was ranked first while the one with the lowest RII was ranked last. A one-way Analysis of Variance (ANOVA) was used to determine whether differences in the level of understanding of the basic topics in plant and machinery valuation between the male and female respondents are significant statistically while the Spearman's Rank-Order Correlation Model was used to determine whether the male and female respondents under study relate significantly in their opinions regarding the teaching and learning of plant and machinery valuation in the University.

Table 1: Demographic Characteristics of the Respondents

Characteristics	Frequency
Gender	
Female	34(37.8%)
Male	56(62.2%)
Total	90(100%)
Age Group	
15 20 years	1(1.1%)
21 25 years	47(52.2%)
26 30 years	37(41.1%)
31 35 years	3(3.3%)
36 years +	1(1.1%)
No Response	1(1.1%)
Total	90(100%)
Marital Status	
Divorced	1(1.1%)
Married	9(10.0%)
Single	79(87.8%)
Widowed	1(1.1%)
Total	90(100%)
Source: Field Survey (2011)	

value on economic losses associated with contamination of subsistence farmlands. An assessment and quantification on the financial contribution of such farmlands to the sustenance of families and the community at large; the possibility that there will be limited or no food supplies during the entire period over which the contaminant interferes with crop production and crop yield can be scientifically determined by a combination of inputs which address the nature and intensity of contaminant and the implication for the farmer. An accurate estimation of all these variables in economic terms would provide valuers with the inputs required to feed into the mathematical models.

The study highlights some of the issues for consideration in valuing contaminated agricultural lands for compensation, as indicated from an analysis of the responses. Whatever recommended or suitable valuation method that is applied by the valuer, it needs to take the following findings into consideration:

- Will farmers need to find an alternative source of food supplies to replace the farm products affected by the presence of contamination?
 - What would it cost them on a regular basis for the replacement food supply source and for how long will this last?
 - Will farmers need to re-locate their farmlands due to the presence of contamination?
 - Will alternative farm lots maintain a radius of 2km to 5km travel distance from their current residence and if not what are the cost implications?
 - Judging by the traditional land-use patterns and farm plot allotment systems, will these farmers get alternative farmlands for free or would it cost a monthly rental from neighboring communities?
 - Will farmers who practice mixed cropping be assessed in a similar manner as those who concentrate on a single crop type?
 - Will the compensation assessment cover the entire period from contamination to restoration with and without the intervention in the

form of clean-up and remediation?

- If the principle of value for value is to be applied, will a cost benefit analysis be required to determine the mode and practicality of compensation?
- Is it possible to convince farmers that the compensation levels are pegged by statute and do not depend entirely on a professional and scientific assessment of the perceived and actual loss to the farmer?

CONCLUSION

The assessment and payment of fair, adequate, equitable and full compensation to agricultural land owners or occupiers, could serve as a deterrent to continued indiscriminate land pollution by industry and individuals globally. This can only happen where the full and comprehensive assessment of the magnitude of actual losses can be computed and interpreted within the context of value. The vale which should be to the loss as understood through the perceptions of the affected victims is crucial. Inadequate compensation ultimately results in substantial losses by aggrieved community members.

The study highlights the perceptions of farmers in issues of pollution and the assessment of compensation. What is of primary importance to them are issues to do with how subsistence farming as a process can be sustained or replaced with monetary compensation and whether the assessment process can be scientifically and technically correct and transparent in keeping with the principles of compensation assessment as entrenched in several laws and statutes. In Nigeria, the main statutes dealing with compensation are not detailed enough to ensure that that the expectations of the owner in terms of his articulation of his loss can be assessed in a transparent manner.

The perceptions and preferences of land owners coupled with the value of loss as understood and interpreted by the victims should from part of the underlying principles for decisions relating to compensation of agricultural lands. This paper does not however address livestock; game or forestry resources which complement the agricultural practices of local farmers. Judging also by the introductory section of this papers, the focus in the UK and that of Nigeria, differ in context

even though the underlying assumptions of procedure are similar.

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- The Nigerian National Petroleum Corporation (NNPC) Act Chapter 320 Laws of the Federation of Nigeria 1990
- Mineral and Mining ACT Cap M12 Laws of the Federation of Nigeria, 2004

specialist valuers of today have progressed a long way since those early days of insurance valuations in dark, satanic northern mills, and they now require highly specialised skills, knowledge of aspects of the insurance, accountancy, legal and real estate valuation professions, and an allround knowledge of the plant and machinery utilised in a proliferation of industries and trades, together with a willingness to pack a suitcase and depart for any corner of the world at the shortest notice."

In Nigeria, plant and machinery valuation practice preceded plant and machinery valuation education. The early practitioners in the country were engaged as chartered surveyors (general practice) within the broad scope of real estate valuation. The enactment of the Estate Surveyors and Valuers Registration Decree No. 24 (now Act) of 1975 facilitated the regulation of estate surveying and valuation practice in the country in all its aspects and ramifications, including the valuation of plant and machinery assets for various purposes. The massive expansion of the Nigerian economy in the 1970s during the oil boom era resulted in the development of industries in the country by the government and private investors. This created opportunities for the valuation of industrial assets, including plant and machinery for mortgage, sale, purchase, take-over bids, compensation for compulsory acquisition, among other purposes. In 1992, the Federal Government of Nigeria through the then Federal Ministry of Works and Housing affirmed valuation of plant and machinery as a core part of the property valuation service and included the remuneration in the scale of fees for consultant estate surveyors and valuers in the country.

2.0 EDUCATION OF PLANT AND MACHINERY VALUERS IN NIGERIA

Formal education and training of plant and machinery valuers started at the College of Estate Management in the United Kingdom. The teaching of the course at that time was based on the syllabus of the plant and machinery option of the professional examinations of the Royal Institution of Chartered Surveyors (RICS) London. The RICS is the foremost professional body for the surveying and valuation profession worldwide. In Nigeria, the teaching of plant and machinery valuation started at the University of Nigeria, Nsukka in 1970. At the beginning, it was taught as a component of Advanced Valuation and Rating Valuation courses and in 1987, plant and machinery valuation was introduced as a separate course in the Department of Estate Management of that institution for the first time in any Nigerian tertiary institution (Umeh,

2009). Since then, universities, polytechnics and colleges of technology in the country have reviewed the curriculum of their Estate Management and Valuation programmes to include plant and machinery valuation as a course within the Estate Management and Valuation discipline. Also, the Nigerian Institution of Estate Surveyors and Valuers (NIESV) offers plant and machinery valuation as a major component of its applied valuation course in its professional qualifying examinations (NIESV, 2006). The relevance of plant and machinery valuation in the industrial and economic development of a nation cannot be overemphasized. With respect to the British economy, Derry (1985) reported as follows:

"There is no doubt that the management of British manufacturing industry is showing an increased awareness of the importance of being fully informed of the realistic worth of their plant and machinery assets. Following the asset stripping takeovers of the sixties and seventies, the adoption of the Current Cost Accounting Standard and a new awareness of the consequences of underinsurance, the advantage of sound professional advice in respect of the value of plant and machinery is now more fully appreciated and the specialist valuer can look forward to an increasingly important role in the future"

In the context of Nigeria, these specialist plant and machinery valuers cannot be produced without effective teaching and learning of plant and machinery valuation in the nation's tertiary institutions. A major constraint to effective understanding of plant and machinery valuation in Nigerian tertiary institutions is inadequate practical plant and machinery valuation exercises. This is due to the lack of collaboration between the valuation industry and the academia in the training of plant and machinery valuers in the country. Manaf and Razali (2005) identified a similar problem in Malaysia and further argued that lack of practical training opportunities has significant impact on the quality of plant and machinery valuation education and practice in that country. As concluded by Nasir, Eves and Yusof (2012), clear understanding of plant and machinery valuation will improve the acceptance of valuation reported to other professions and clients, as well as stimulate the plant and machinery valuers' capability. On this basis, this paper examines the education of plant and machinery valuers in Nigeria based on the perception of under graduate students towards the teaching and learning of plant and machinery valuation in a typical Nigerian university.

EDUCATION AND TRAINING OF PLANT AND MACHINERY VALUERS IN NIGERIA: IMPERATIVES OF INDUSTRY-ACADEMIA COLLABORATION

Ву

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ABSTRACT

This study examines the education of plant and machinery valuers in Nigeria based on the teaching and learning of the course in a typical Nigerian University through an empirical study of 90 graduating estate management and valuation students who have been taught plant and machinery valuation as a major course required for graduation. Data for the study were obtained using structured questionnaires administered to 90 graduating estate management and valuation students at the Federal University of Technology, Minna, who have been taught plant and machinery valuation for a whole academic semester. The respondents were selected through purposive sampling technique. The study found that the respondents' overall level of understanding of the basic topics in plant and machinery valuation was highest in the classification of plant and machinery assets and lowest in computer applications in plant and machinery valuation. Analysis of Variance (ANOVA) in the level of understanding of the basic topics in plant and machinery valuation between the male and female respondents produced an F-ratio of 0.39 at p-value greater than 0.05. The respondents strongly agreed that practical exercises in the field will facilitate understanding of plant and machinery valuation. The study concludes that there is need for more practical and field exercises in the teaching and learning of plant and machinery valuation course. Such initiative should be anchored on effective collaboration between the academia and experienced practitioners in the Nigerian valuation industry.

Keywords: Teaching; Learning; Plant and Machinery Valuation; Students; University; Nigeria

1.0 INTRODUCTION

According to the International Valuation Standards Council (IVSC, 2010), a plant is an asset that is inextricably combined with others and that may include specialised structures, machinery and equipment, while a machinery is an apparatus used for a specific process in connection with the operation of an entity. On the other hand, equipment is defined as other assets that are used to assist the operation of an enterprise or entity (IVSC, 2010). In simple terms, plant and machinery valuation entails the valuation of plant, machinery and equipment for various purposes. These purposes have been classified by plant and machinery valuation scholars as either transaction-driven or non transaction-driven (Budbhatti, 1999; Umeh, 2009). Plant and machinery valuation is one of the core courses taught within the Estate Management and Valuation curriculum of universities, polytechnics and colleges of technology in Nigeria. The

education and training of plant and machinery valuers in Nigeria derived its origin from the United Kingdom. Generally speaking, the education and training of plant and machinery valuers in modern times originated in the United Kingdom and were of two stages. Initially, it was informal in nature and gradually developed into formal training as plant and machinery valuation became firmly established within the General Practice Division of the Surveying and Valuation profession in the UK. Derry (1985) traced the genesis of present-day plant and machinery valuation practice to the middle of the nineteenth century and narrated as follows:

"Although machinery appraisals have been undertaken probably from the time of the earliest civilisation, the plant and machinery valuation profession of today has its roots firmly set in the middle of the nineteenth century, when it was largely based upon the textile industry in the North of England. The

THE ERROR IN ORDINARY ANNUITY ASSUMPTIONS IN NIGERIAN INVESTMENT VALUATION

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Abstract

Purpose: The paper addresses concerns that rent in arrears assumption in UK investment valuation models do not appropriately address the rental payment position in the UK's former colonies.: The paper examined valuers' perceptions of factors responsible for the continued use of ordinary annuity assumptions in spite of the apparent inappropriateness in application. .Valuation surveyors in Nigeria were offered as a case study of how valuers in one Commonwealth country respond to such conceptual investigations.

The perceptual responses showed that the three most important factors hindering a shift over to the more appropriate annuity due assumptions in investment valuation are the lack of guidance/directives to valuers by the regulatory bodies on the use of rent in advance assumptions, the lack of annuity due valuation tables and the perception that annuity due calculations involve substantial complexity. The paper suggested that the way forward must involve the Nigerian valuation regulatory bodies instituting annuity due modeling in valuation standards, sponsoring the development of tables that are appropriate for the Nigerian situation and enforcing training in annuity due models in academic and professional training/textbooks..

Keywords: Ordinary annuity, Annuity due, Investment valuation, UK, Nigeria

1.0 Introduction

In this paper, the focus is on annuity due assumptions in investment valuation in countries of the Commonwealth who inherited the UK investment valuation model in their colonial periods and who presently undertake investment valuations using all the assumptions of the inherited model. However, not all the assumptions in the formulae of these UK models reflect realities in the erstwhile colonies. We emphasize that there is nothing wrong with the UK model when correctly applied. However, models are based on assumptions. When applying such models to locations different from where the models were developed, it is often necessary to assess whether the assumptions fit into local circumstances. Where they do not, it is frequently necessarily to adapt the model by modifying its assumptions to suit the situation on ground. One area where this has not been done in many Commonwealth countries is in the use of ordinary annuity assumptions whereas annuity due assumptions are more appropriate (Ordinary annuity in leases refer to rent payment in arrears while annuity due refers rent payment in advance).

The situation can be traced to colonial times in the twentieth century. Beginning in 1913, early editions

of the UK Parry's valuation tables addressed the economic situation that was current in the UK the early part of that century namely that rent was received annually in arrears (ordinary annuity). However, rent payment patterns changed and in the United Kingdom, rents on most classes of property investment began to be receivable quarterly in advance after the mid twentieth century. Investment valuation modeling in Parry's tables in the 1960s till the 1990s however initially continued with the assumption that rent was payable annually in arrears. To address this anomaly, two alternative tables were developed in the UK in the 1970s -Rose's Valuation tables (Rose, 1977) and Bowcock's Property Valuation tables (Bowcock, 1978). Rose's tables consider income receivable quarterly in advance with interest credited annually. Bowcock's tables consider income receivable quarterly in advance and interest accredited half yearly. More recently the 2002 edition of Parry's tables has also included quarterly in advance tables along with the annually in arrears tables. It also provides yield conversion tables to facilitate conversion between nominal and effective yields (true equivalent yields). The point being made is that even if belatedly, there is an ongoing remodeling of the investment valuation model in the UK. The remodeling involves reshaping the formulae away from ordinary annuity assumptions towards using quarterly in advance assumptions. This is a rational reaction to changed UK rent payment terms which now evince quarterly rental payments. The purpose of income valuation theory is after all to duplicate the behaviour of average investors in practice.

However, the remodeling in all these three UK tables (Babcock's, Rose's and Parry's revised tables) do not address the rent position in Nigeria. Ghana and other Commonwealth countries where most often, rental income is receivable annually (not quarterly) in advance. This notwithstanding, Commonwealth valuers and their regulatory Institutions still conservatively use the ordinary annuity assumptions contained in the investment valuation models in Parry's tables inherited from the UK in colonial times even though the rent payment terms in their leases do not agree with the rent payment assumptions of Parry's 1913 modeling. There is presently no institutionalized move yet in Nigeria, Ghana and other Commonwealth countries to rectify this abnormality. Even the remodeling in the UK which modifies investment formulae to the use of quarterly in advance based valuation modeling has apparently evoked little academic/professional response in erstwhile colonies towards modification of their valuation formulae and tables. The paper investigates into reasons for this. The basic question investigated is on the factors driving the continued usage of a model whose rent payment assumptions are clearly inappropriate in an erstwhile colony. The paper examines these factors with a view to ascertaining required steps towards better practice based on

more appropriate assumptions. Nigeria is provided as an example of how valuers in one Commonwealth country respond perceptually to such inquiries.

The paper is structured into seven sections. The first is introductory. The second section examines basic ideas of investment valuation based on ordinary annuity and annuity due. This is followed by a literature review of relevant papers/texts on ordinary annuities and annuities due teasing out factors that could potentially drive the continued usage of the ordinary annuity model. The fourth section presents the research method adopted in the empirical sections. The results are presented in the fifth section, after which a case study of the difference in value using ordinary annuity and annuity due modeling is provided. The study closes with implications, recommendations and concluding comments in section seven.

2.0 Basic Ideas of Investment Valuation Modeling Based on Ordinary Annuity and **Annuity Due**

The income approach to value (called investment method of valuation in the UK and Commonwealth) is based on the principle of anticipation. The principle of anticipation affirms that value is created by the expectation of benefits to be derived from possession, operation and/or capital gain at resale. The principle accordingly uncovers the relationship between anticipated earnings (rental income) and value for comparable property types. Following the principle of anticipation, the income approach to valuation produces earnings (income payment or annuity) related capital value which is taken as an investor's estimate of the price of his investment. In other words, what the investor is purchasing is an annuity (a stream of payment inflows made through time). Market value is taken to be a market's or investor's expectations of the total of the annuity (future inflows of capital to his investment) over the period of the holder's interest.

In valuing such annuities, account is made in the income approach for the time value of money. What this means is that earnings are of more value to its holder today than if the same sum were to be received in the future. Following such reasoning, market value in the income approach is the summative value of expected future returns (annuity), but each of the future returns are discounted (reduced) to a present equivalent sum based on the time value of money at an appropriate compound rate of interest. In the UK and the countries of the British Commonwealth (including Nigeria), the multiplier applied to the annuity is an equity based multiplier called "Years. Purchase" (YP). In the US, the multiplier was up to the mid 1970s mortgage-equity based (it is now equity based as in the UK). The major aspect of valuer's expertise is in predicting and advising on such capitalized annuities.

It stands to reason that in the process of capitalization of initial rent, in the interests of appropriateness and arithmetic accuracy, account should properly be made of whether the annuity income is received at the beginning of the time period (in advance) or at the end of the time period (in arrears). If the payments are made at the end of each time period valuation/appraisal literature would describe it is an ordinary annuity. The annuity series for ordinary annuities (where rent is receivable in arrears) is of the following pattern:

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the citizenry in tune with global best practices. 'Due process' is a current public procurement reform in this mould. It is against the above background that this paper sought to provide a real estate perspective to the reform. In doing as above stated, it reviewed the concept of economic reform linking that of 'due process' to its financial couple- banking reform as is currently tenable in the case of Nigeria and with which it shares efficiency and effectiveness objectives. The paper also reviewed, and presented the general intendment of the 'due process' law Public Procurement Act No. 14 of 2007, highlighting the aspects that relate, and/or should relate, to real estate management as legally practiced in Nigeria.

The paper then found generally that some literature sources tend to mix-up procurement method with bidding or tendering which is rather a phase in procurement and that public procurement is important to, and a significant proportion of, the economic activity of most countries.

It was also found that good public procurement goes beyond mere acquisition to include soundness of the process and must incorporate competition, transparency, and integrity. The literature also shows that the choice of a procurement approach should be driven by repeatability, complexity, value and risk, and commonality, while the major challenges tend to originate from the market structure, legal framework, and political environment.

In the specific case of 'due process', and Nigeria, it was found that public procurement function is mainly covered by tender boards of various government ministries, departments and agencies (MDAs) who relied mostly on the traditional design bid-build procurement model. The major challenges include corruption, fiscal irresponsibility, increasing private sector participation, and poor procurement culture. Other drawbacks include bureaucracy, use of 'lowest evaluated responsive bid', preference for traditional design-bid-build model by most stakeholders/operators, and its definition of value that actually means cost and hence confirming the emphasis only of fiscal responsibility to the disregard of value enhancement.

Finally, this paper opines that the absence of the real estate professional in the membership of both the NCPP, and BPP constitute a serious omission that diminishes the reform, and therefore needs to be rectified. It is further concluded that beyond the functions which can be performed by the real estate professional in 'due process', the definition of "works" in the PPA 2007, provides the clearest and most direct real estate perspective to the reform by its specification of land-based development, in its entirety.

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If the payments are due at the beginning of the period, it is an annuity due. The rent received in advance coincides with the end of year (n - 1). Accordingly, the annuity would read

Given the differences in annuity streams between ordinary annuity and annuity due situations (equations 1 and 2), the YP formulae models for rent in advance and rent in arrears situations vary considerably. It follows that issues of rationality and arithmetic accuracy are bound to be raised where the YP formulae adopted does not reflect rent payment practice. Leases and rental payments in most Commonwealth countries are largely based on rent payments in advance and at least theoretically should be require annuity due valuation modeling.

3.0 Literature Review

The focus of the review is on the literature on how annuity affects investment valuation formulae modeling. Most of such literature has been contained in textbooks. The thrust of the case is accordingly mostly focused on the textbook treatments, teasing out factors that could potentially drive the continued use of ordinary annuity models in Nigeria.. Factors identified in the literature would then be subject to empirical testing in latter sections. The literature in this regard is quite limited in Nigeria. The feeting in results are the literature would $YP_{singlerate} = \frac{1 - \frac{1}{(1+i)^n}}{4[1 - \frac{1}{4/(1+i)}]}$(4) Nigeria. The focus is mostly on the literature generated in the UK.

The Estates Gazette published the first edition of Parry's valuation tables in 1913. When first published, these tables rightly assumed that rental income was receivable annually in arrears because rent in the UK at that time was paid at the end rather than at the beginning of leases. The annuity series adopted was that earlier described in equation 1: Using this annuity pattern of equation 1, Parry's tables summarized the YP single rate formulae to

In the UK, the pattern of receipt of rental annuity changed in the latter part of the twentieth century and UK rents began to be received quarterly in advance. Revisions of Parry's tables in the 1960s till the 1990s however continued with the assumption that rent was payable annually in arrears. One factor suggested for this was the conservatism of the UK valuation community, which did not allow it to respond quickly to investment formulae changes required by the change in rent payment patterns (Ajayi, 2010). Another factor that could possibly be adduced for this reluctance to change is the supposition was that the investment model based on ordinary annuity assumptions could still gave accurate results despite the wrong annuity assumptions since as Crosby (1992) observes, if all valuers in a market employ the same method, then an accurate model tends to result notwithstanding the irrationality of the adopted method.

Nevertheless by the 1970s, valuation literature in the UK began to recognize the inappropriateness of the existing ordinary annuity basis of Parry's tables as the academia began to concern itself with deriving YP formulae for annuities based rent in advance. Rose (1977) was among the first to argue for rent in advance based formulae. He envisaged that a factor that could possibly inhibit the valuation community in adopting rent in advance formulae might be the lack of valuation tables, and consequently, he produced tables based on dual rate YP tables adjusted for tax and calculated on the basis of rents and sinking fund instalments being paid annually or quarterly in advance. Rose's tables considered income receivable quarterly in advance with interest credited annually. His formula for the YP to be applied to an income receivable quarterly in advance they derived was

i is the above formulation represented the annual nominal rate of interest. The expression for the YP of a reversion to perpetuity was:.

About the same time, another advocate for change in investment modelling based on rent payment patterns was Bowcock (1978) who also produced rent in advance tables to assist the valuation community in transiting to rent in advance based formulae. In his tables, he considered the formulae for income receivable quarterly in advance and interest accredited half yearly. Unlike Rose, his tables were produced on the assumption that when one refers to a nominal rate of return of say 7%, one is talking of an effective rate of return higher than this. He considered that most investments have less than annual conversions of interest and in particular that most investment interests are converted on a half-vearly basis. (We note on the other hand. Enever and Isaac, 2002 cite evidence to show a variety of other methods of conversion). Babcock's

tables employed the same formulae as Rose's (equations 3 and 4 above), with the exception that the i in the formula represented the annual effective rate of interest rather than Rose's nominal rate.

In the 1980s and early 1990s, valuation texts developed by the UK academia such as Enever (1981), Richmond (1985), Baum & Mackmin (1989) and Isaac & Steley (1991) began to include the rent in advance formulae in their texts, noting the greater appropriateness and arithmetic accuracy would result from the profession changing over to rent in advance formulae. Isaac & Steley (p.95) for example point out that "recognition of the rent income pattern is essential for analysis so that the correct discount rate is used for the income pattern being valued..." The various UK texts also noted that in their country, it was customary for interest to be credited at periods less than annually (as Bobcock had noted earlier). Accordingly, the texts emphasized that the rate of interest used in calculations of compounding and discounting must be the effective rate for the period rather than the nominal rate (see for instance Baum & Mackmin p. 49). However, we observe that such advocacy for annuity due modeling are contained in isolated chapters of all the respective texts. The other chapters of these textbooks adopted the rent in arrears credited annually assumption because (as the authors noted), arrears assumptions were still what is "most familiar to practitioners. (Enever & Isaac, 2002, p. 93). This observation by UK textbook writers suggests that a factor that could potentially drive the continued use of ordinary annuity models in Nigeria is valuers, non-familiarity with rent in arrears formulae, and the lack of popularity of annuity due modeling.

Baum & Mackmin (1989) warned that valuers who switch over to the use of quarterly in advance formulae must be sure that they adopt the proper market relationship between income patterns and yields in their valuation work. For example, where the basis of a quoted market is on an arrears basis, it would be inappropriate to transpose it to an in advance calculation. They also pointed out (p. 78) that the use of quarterly in advance tables for the valuation of income received on this basis may be questionable, as it is very rare that the valuation date will coincide with the date when an installment of rent is due; and moreover, the actual income pattern may in fact resemble a quarterly in arrears income even though the lease may stipulate a quarterly in advance payments. $i = 4\left[1 - (1+r)^{-1/4}\right] \dots (6)$ quarterly in advance payments.

In spite of the above discussion among the UK academia on arithmetic accuracy based on correct annuity assumptions, the profession in the UK continued to be largely conservative and many valuation firms and textbooks still used rent in arrears formulae in the 1990s. One other reason why historic practice may have continued in the UK is the relatively low yields on prime properties, that is, the impact of changing the formulae used was not very significant on capital values and was relatively small compared with changes in the yields when interest rate term structures move up or down. Another reason for continuation with historic practice may have been because the investment method is just one method of arriving at a capital value. The direct comparison method was and is still available as a check on the reliability of the investment valuation answers derived.

The advocacy for a widespread use of rent in advance formulae among practitioners was revived when the Investment Property Forum (IPF) issued a paper in 1999 propagating the use of quarterly in advance valuations. They rejected the continued use of the all-risk yield as a nominal market benchmarks based on the assumption that rents are received annually in arrears arguing that this did not reflect the reality of the market and advocated that UK practitioners move towards valuation techniques that reflect the actual timing of the cash flow. Tables produced by the IPF (based on rents received quarterly in advance) worked on the premise that capital values would not change as the profession changed to a quarterly approach. The IPF action in developing rent in advance tables was another pointer that the absence of annuity due tables could potentially drive the continued use of ordinary annuity models

In response to such campaigns, the twelfth edition of Parry's Tables (Davidson, 2002) included quarterly in advance tables formulae that provided for the direct conversion of nominal yields where income is received annually in arrears to effective yields (or true equivalent yields as they are now called) where income is received quarterly in advance and vice versa. The conversion tables were based on the following formulae (see Davidson, p. Xix):

i in the above formulation refers to the nominal yield. and r to the effective vield. Parry's tables however retained the traditional approach to calculation of years purchase, where income is deemed to be

warranties for exercise of requisite skills is a professional practice liability issue which may be required under the Act.

PART V:- Organization of Procurement: s.19 (b) (c) deals with credibility as a procurement observer and/or representative of a professional organisation. The real estate perspective here relates to the estate surveyor and valuer who can be an observer or represent NIESV in procurement of land-based items; s.23 (8), (10) (11) refers to prequalification of service provider or consultant especially if the service is real estate management

PART V:- Procurement Methods: the real estate perspective here relates to the need for the real estate professional to ensure adherence to best professional practices and ethical conduct when involved in the procurement of real estate as this sector is covered by some special statutory requirements, such as in statutory valuations, when transactions involve land in all its ramifications.

PART VI:- Special and Restricted Methods of Procurement: s.4(b) proposal solicitation involves technical, quality and other characteristics of works and professional competence/technical qualifications of suppliers/contractors who can be real estate professionals.

PART VIII:- Procurement of Consultancy (Services): This can arise where a procuring entity requires the services of real estate professionals for land/land based investment hence presenting a clear real estate perspective.

PART IX:- Procurement Surveillance and Review: s.53 the possibility of investigation demands that documents such as field records, valuations of real estate, etc be properly done and preserved

PART X:- Disposal of Public Property: Property disposal implicates a market situation which emphasizes value rather than cost and hence a fundamental consideration in securing value-formoney in the disposal of "works"; s.55(1) application of PPA 2007 is modified by the Public Enterprises Act 1999; s.55(2) defines intangible, and tangible items, with the real estate connotations of the latter. s.56(1) deals with preparation of valuation report by an independent evaluator or such professional with appropriate competence to undertake the valuation; s. 56 (3) talks about timing disposal for most advantageous returns. The last two sections provide real estate perspectives to the value process when it involves capital assets.

PART XIII: Miscellaneous: This section deals with definitions in the Act. It is important to note here that the definition of 'value' in the Act is misleading in relation to real estate since it is the monetary value set by the Bureau, and not derived from valuation by a valuer qualified under the law in Nigeria.

Further to the above, some observations become necessary as a way of providing a general real estate perspective and critique to the discourse in terms of stakeholder roles. This section will also highlight some sections that should interest the real estate professional. In the above regard, this paper notes the absence of the estate surveyor and valuer in the membership of both the National Council on Public Procurement, and the Bureau of Public Procurement (Part I and II of the Act), Considering that the estate surveyor and valuer is the person professionally qualified, and legally permitted to value interest in land, the above oversight needs to be addressed if the best value-for-money is to be secured from the disposal of public capital assets, in addition to its statutory implications. The provision for possibility of the estate surveyor being co-opted. is unsatisfactory especially where the co-opted person has no voting right nor counts towards quorum.

The idea in Part X, s.56 (1) of preparing a valuation report by an "evaluator" or such professional with appropriate competence reflects a poor real estate perspective that is not only open to varied interpretation and hence abuse, but needs correction in favour of specific mention, and the naming especially of the estate surveyor and valuer as the only person qualified under law in Nigeria to put value on capital assets.

Generally speaking, the real estate professional needs to note some salient aspects of 'due process' functions and powers of both CNPP and BPP (power to debar), scope of application (Part III, s.15(1)); liability for non-performance (Part IV, s.16(3); exclusion from participation (s.16(18); and professional/technical qualifications (s. 16(6)).

Finally, the provisions of the code of conduct (Part XI), offences (Part XII) and miscellaneous (Part XIII) sections of the PPA 2007 need to be taken to heart while contemplating the real estate perspective to public procurement in Nigeria.

SUMMARY AND CONCLUSION

The need for economic empowerment of citizens is growing especially in developing countries of the world leading to reforms aimed at achieving efficiency and effectiveness in the national economy and increasing the purchasing power and quality of life of

countries. It also limits private sector involvement, and understanding by the ordinary citizen of government's procurement system thereby encouraging the existence and sustenance of cabals and cliques.

Fiscal Irresponsibility: This can simply be said to be the inability to be rational in spending hence this paper agrees that the subject is the most severe problem facing public institutions in Nigeria (Akindale et al, 2002) and by extension, public procurement. The Fiscal Responsibility Act 2007 (Federal Government of Nigeria, 2007), patterned after its 24 years older United States of America version was enacted to arrest this problem. To this paper, fiscal irresponsibility in the Nigerian context manifests in two main forms: "unrealistic capital budgeting and poor public expenditure management" (Elumilade et al, 2006) resulting in extra-budgetary expenditure sustained by recurrent deficit budgeting and leading to general macroeconomic instability (Okonjo-Iweala and Osafo-Kwaako, 2007).

As noted earlier, in this paper, and by definition of "works" in the PPA 2007, public procurement and due process deal substantially with capital assets which, in turn, are substantially land-based and therefore clearly related to real estate hence the need to attempt a real estate perspective to this reform.

NIGERIA'S DUE PROCESS: A REAL ESTATE PERSPECTIVE?

In this section attempt is made to determine if a real estate context exists within 'due process'; determine the extent of the said context, and postulate some implication especially as they affect the real estate professional, and against the need to "run procurement as a project" (Office of Government Commerce, 2008).

Considering the first objective it can be said that earlier sections have shown that Nigeria's due process' has a real estate content/context since it has a lot to do with the procurement of land-based capital assets defined as "works" in Part XIII, No. 60 of the PPA2007 (Federal Government of Nigeria, 2007).

The above position simply follows from this paper's acceptance of the philosophy of perspectivism, developed by Friedrich Nietzche, and which suggests in part that "it is our needs that interpret the world" (Wikipedia, 2010) and hence the, basis for pursuing the remaining objectives of this section. "Perspective" derives from a root perspicere (Latin) and perspectivum (medieval Latin) meaning to see through, depicting relationship and giving rise to visual, literature, psychological and cognitive

(choice of context for opinion) contexts, to which this paper is referenced. The extent of the real estate context is parameterized via what this paper calls 'relevant reference' meaning the identification of provisions/practice of the PPA2007, as the flagship of public procurement in Nigeria, that can be construed, to refer to either real estate management, real property or the legal practice of the profession in Nigeria.

It is important to note at this juncture that the PPA 2007 is a 13 part, 61 section, and 43 page piece of legislation properly cited as the Public Procurement Act No. 14 of 2007 with a commencement date of 4th June, 2007. Following the relevant reference rule earlier established in this paper, the real estate perspective is presented below in as much order of precedence of the Act's provisions as possible and with comments and explanations where necessary.

PART I:- Establishment/membership of National Council on Public Procurement (NCPP): s.13 may co-opt into membership any person who shall not have a casting vote nor count to quorum. The estate surveyor and valuer can be so co-opted as above for purposes of real estate advice.

PART II:- Establishment of the Bureau of Public Procurement: s.14 presents one of the objectives of the Bureau as the procurement and disposal of public assets and services. A possible implication is market, and value implications of the concept of a 'sale' for an asset that is land or permanently fixed to land hence the need for the professional input of the land professional who is best trained in this circumstance; s.6(I) (IV) power of the Bureau to transfer disposal function ... to a third party or consultant who should rightly be a qualified real estate professional if the best value for money is to be achieved; s.6(f)(m)(3)(c) liaise with relevant bodies or institutions to effectively perform its functions. Where this function involves real estate, the Nigerian Institution of Estate Surveyors and Valuers (NIESV) becomes a possible candidate for this type of liaison.

PART III:- Scope of Application: s.15 (I) (a) all procurement "of ...works", is a reference that implies a real estate perspective that needs to be noted.

PART IV:- Fundamental Principles for Procurement: s.6(a) (i) adequacy of professional and technical qualifications can be seen to relate to qualifications of the professional, and/or his practice especially if "works" are involved in the procurement; s.28 similarly, the requirement of

received annually in arrears in the same volume in an effort to satisfy both the advocates of quarterly in advance valuations and the traditional adherents to annual in arrears valuations. Davidson's provision of conversion tables suggests that a factor that could encourage adoption of rent in advance formulae is the provision of conversion tables.

French & Cooper (2000) criticized the quarterly in advance formulae in Parry's Tables, arguing that the effective yield formula provided by Parry's does not reflect quarterly payments that are received in advance so compromising the accurate transition from annually in arrears to quarterly in advance based valuations. They pointed out that it would be more correct to assume that capital values will not change as the profession changes to a quarterly approach; that it is the yield which should therefore be expressed differently. They suggested that the way in which the yield is expressed is not the critical issue; it is the multiplier against the rent which will determine value. On the basis of these arguments, the paper provided a formula which they argued should more accurately transfer annually in arrears data into quarterly in advance data together with the formulae required for contemporary growth explicit discounted cash flows (DCF).

principal UK valuation textbook. Johnson et al (2000) in the preface to the ninth (the most recent) edition of the standard UK text "Modern Method of Valuation", noted the campaign of the Investment Property Forum (IPF) to persuade valuers to switch from the rental payment assumptions of annually in arrears to quarterly in advance and the authors of the text stated that they actually discussed the issue with the IPF. The textbook authors however decided to retain the use of ordinary annually formulae and tables as they believed that this still reflects the general practice throughout the UK profession. Nevertheless, they observed in their prefatory comments that they "would not be surprised if they (the authors) had to switch to quarterly in advance for the tenth edition". Such observations again suggest to us that two factors potentially driving the continued use of rent in arrears formulae are first. valuers. non-familiarity with rent in arrears formulae and second, the absence of regulatory instructions from the RICS which apparently has not been as proactive as it could be in taking a firm stand on the matter and providing valuation information papers for best quality guidance.

More recently, Tipping (2006) observed that there is an increasing tendency towards a monthly in advance residential rental payment pattern in the UK following residential tenancy reform in the 1980s and 1990s. Monthly retail tenancies were also noted. Tipping observed that Parry's tables (Davidson, 2002) provides formulae to convert from nominal annually in arrears tables to effective quarterly in advance tables, but argued that it is now appropriate to also present formulae to address monthly conversions. He observed that this should not be a problem for valuers especially since the computer has made the formulation and use of valuation models easier. Drawing from Davidson's (2002) approach for the conversion of nominal yields to true equivalent yields, he derived two formulae for calculating nominal and effective yields with respect to monthly in advance rental patterns as follows:

For the conversion from the effective yield based upon rents receivable monthly in advance to the nominal yield:

$$i = 12 (1 - [1 + r]^{-1/12}) \dots \dots \dots \dots \dots (8)$$

For the conversion from the nominal yield to the effective yield based upon rents receivable monthly in advance:

The observations of Tipping suggest that a factor that could potentially drive the continued use of ordinary annuity models in place of quarterly in advance modeling is that quarterly in advance modeling does not reflect the emerging monthly in advance that are increasingly common in UK leases, and there is no modeling available to take into account the monthly modeling.

The above discussion shows that there is some progress in the UK towards appropriate annuity modeling, though the profession and textbooks are somewhat conservatively hesitant to make a full conversion from annually in arrears to quarterly or monthly in advance. In Nigeria on the other hand, the discussion on rent in advance versus rent in arrears issues and advocacy in that regard has been relatively very limited. Only two academic papers (Okoye, 1994 and Ajayi, 2010) have discussed this issue, advocating for the use of rent in advance formulae. Okoye's paper used worked examples to demonstrate the arithmetic inaccuracy of rent in arrears calculations. Ajayi's paper was an inaugural lecture which among other things advocated for increased rationality through the use of rent in advance formulae in Nigeria. These academic papers were however theoretical; they

did not for example extend to empirically examining factors driving continued use of ordinary annuity modeling.

Apart from these academic papers, one is aware of three valuation tables that have been produced in Nigeria. Two of these tables (Ifediora, 1996 and Chika, 2009) use the same ordinary annuity formulae as that employed in early editions of Parry's tables. There major contribution was in terminology, for example, using Nigerian terms such as naira in place of pounds. The third table (Adeyemi, 1998) was partly based on annuity due formulae with interest credited annually. In his prefatory notes Adeyemi suggested that a factor preventing valuers from adopting annuity due modeling in Nigeria was that there are "no tables to assist valuers in this respect so as to arrive at a dependable solution to the problem of how much, which usually confronts property investors". However, though Adeyeni's tables were a significant step in the advocacy for annuity due modeling assumptions, he inexplicably uses rent in arrears formulae for some computations in his tables and rent in arrears computations for others.

Most of the limited Nigerian discussion on annuity due models has been contained in textbooks. Valuation teaching in Nigeria was initially based on UK texts, particularly the "Modern Methods of Valuation" and followed this text's conservative reluctance to use rent in advance formulae. The first Nigerian valuation textbooks (Ifediora, 1993 and Ajayi, 1998) and valuation texts that followed in the 2000s (Kuye, 2000; Kalu, 2001; Chika 2006 etc), also based their textbook calculations on the assumption of rent received in arrears. A factor noted by the authors of these texts for continued use of ordinary annuity assumptions was similar to that put forward by the authors of the UK text "Modern Method of Valuation"; that the advance formulae are not yet in popular use. However, some more recent valuation texts (Udo, 2003; Ifediora, 2005) have begun to present rent in advance formulae as exercises in model building, though calculations in their respective texts still mostly reflect the use of old UK rent in arrears formulae. The in advance series YP for rent received annually in advance was summated in Udo's text to:

$$YP = 1 + YP_{(n-1)} = 1 + \frac{1 - \frac{1}{(1+i)^{n-1}}}{i} \dots (10)$$

The alternative US oriented formula put forward in Ifediora's text is as follows:

Though the formulas (10 and 11), appear different, they are both correct, and provide the same answers. They appear in different formats because they are derived through different but equally valid processes of thought.

The above review shows that there is a substantial gap in the literature on the use of rent in advance formulae in Nigeria. Whatever literature that exists has been mostly pedagogic, comprising of two academic papers, a few textbooks and one of three valuation tables, which showcase the formulae for rent in advance valuations, and vaguely hint at the use of such formulae sometime in the future. There has been no empirical investigation of factors inhibiting adoption of annuity due based modeling. The review has however teased out a range of possible factors potentially driving the continued use of ordinary annuity modeling which would be examined empirically using the methodology described in the next section.

4.0 Research Method

The research addressed two study populations. The first was firms of estate surveyors and valuers based in Lagos, Nigeria. Lagos metropolis is the commercial nerve centre of Nigeria housing about fifty per cent of Nigeria's valuation firm head offices. The sample frame of these firms was secured from the Directory of the Estate Surveyors and Valuers (2009) which pointed to a total of 270 firms in the study area. The decision was to sample seventy per cent of this sample frame. Accordingly, a total of 189 Estate Surveying firms in Lagos Metropolis were presented with questionnaires in a cross-sectional survey. Respondents were selected based on a stratified random sampling framework: the researcher first divided the total valuation firm population into strata/groups following the six business districts in the study area including Victoria Island, Ikovi, Lagos Island, Apapa, Surulere and Ikeja. Such stratification was employed in earlier valuation studies such as Ogunba (1997, 2003) and Olaleye (2005). Within each stratum a random sampling approach was employed. To measure perceptions of driving factors, the paper employed ordinal scale (Likert type) questioning. Such data was analyzed using the relative importance index (a form of weighted average ranking). The relative importance index (RII) score of each factor was determined using the following expression:

Where: w = weight, f = frequency of specific responses and N = total frequency.

Essentially, each point on the ordinal scale is

secret' and 'establishment' culture, the entailed process lay, as it were, outside 'public' knowledge and was clogged by 'red-tapism' and public service inertia while its numerous challenges were common and, again, 'unofficial' knowledge.

The attendant challenges gleaned from the literature (USAID, 2005, 2009; Elumilade, 2006; Usman, 2007) can be summed up as including fiscal irresponsibility, outdated procurement system, inadequate regulation/legislation, ineffective supervision/enforcement, and poor procurement/business culture (corruption). Against the above background, this paper is persuaded to posit that the above stated challenges were mere symptoms while the real problem lay with the attitude of the operators. The operators perpetrated consistent and "flagrant abuse of contract award procedures in a way that lacked transparency, competency based competition and merit resulting in the inflation of contract costs and other problems" (Bureau of Public Procurement, 2005).

It was in the above circumstances, coupled with continued use of the traditional design-bid-build procurement model that the Public Procurement Act 2007 was enacted. The Act was complemented with the following: Procurement Procedures Manual, 2008; Budget Monitoring and Price Intelligence Unit (BMPIU) as a 'watch-dog' agency; National Council on Public Procurement (NCPP); and Bureau for Public Procurement (BPP) as the supervising, and implementing organs of government, respectively. It is strictly speaking, the BPP that has the mandate to create a 'Due Process' based on three components contract award, oversight, and certification as parameters for any procurement to benefit from public funding.

It is informative to note that other pieces of legislation have added impetus to the 'Due Process' including the Economic and Financial Crimes Commission Act, Fiscal Responsibility Act and the Independent and Corrupt Practices Act. According to Afemikhe (2008), the PPA 2007 was meant to entrench BPIU budget implementation procedures, ensuring their sustainability beyond any particular government regime: empanel a body to deal with procurement policy guidelines, regulation and enforcement. In particular the Act sort, in part, to encourage/empower local contracting and manufacturing capacity as well as engender process transparency, economy, efficiency, fairness, reliability, accountability, and ethical standards.

Public procurement via 'due process' seeks uniformity and transparency through the use of

three groups of standard documents for the following: national shopping; selection of consulting firms (complex lump-sum, complex time-based, and small assignment lump-sum); and selection of individual consultants (Federal Government of Nigeria, 2007).

Arising from the above sections, perusal of the PPA 2007 and associated documents, and practical experience, some issues in the public procurement reform can be identified. The issues include corruption, central legislation, bid evaluation, competition, transparency, fiscal irresponsibility, bureaucracy, and conceptualization. The above named issues shall presently be dealt with briefly.

Corruption: Considered endemic and pervasive around the world, corruption is seen as the single greatest obstacle to economic and social development (Dreher et al, 2007). It inhibits the provision of public services and in so doing increases inequality and therefore heavily impacts the public procurement market which is estimated at more than 15% of global Gross Domestic Product (GDP) (Organisation for Economic Cooperation and Development 2007).

Within the context of public procurement, corruption can simply be viewed as undue business practices (Soreide, 2004), earlier referenced to in this paper as the 'business culture'.

Central Legislation: The absence of a common central legislation hitherto gave room for varied interpretation/application of existing procurement rules by the different levels of government, and their agencies. On the other hand, commonality and centralization tends to generate bureaucracy bottlenecks. At other times rules of exception come into being to cater for unforeseen circumstances as provided in Part VII of the PPA2007, a situation that can be abused considering that every procuring entity has responsibility for all aspects of procurement.

Competition/Responsive Bid: Intended to keep procurement cost as low as possible, the idea of "lowest evaluated responsive bid" (Part IV (17) fails to capture the essence of competition and optimization. It is also incapable of preventing bidding games such as front loading, unbalancing, unrealistic bids, etcetera.

Transparency:The preponderance and preference by most operators (Asekhame, 2010), of the traditional design-bid-build method in public procurement conflicts with the earlier noted global privatization/deregulation trend in developing

summarized as the traditional, modern and post-modern methods.

PROCUREMENT METHODS

Based on the process view of procurement, the above named methods are briefly presented below as derived from Berry (2005), Delmon (2010), etcetera.

Traditional Methods

In the area of real estate/infrastructure especially, this group of methods is represented by the design bid-build (DBB) form in which the client provides a business case based on a brief and budget. He also appoints a team of consultants to prepare a design/tender documents, and administer the contract on client's behalf as well as advice on specific aspects (design, construction, cost management, disposal/management, etc).

In addition the client appoints the contractor (where nil in-house contractor capacity or diseconomies exist) to construct, and retain liability for, the works with much of the work done by subcontractors(ordinary and nominated). Where inhouse constructor capacity exists, and its use is deemed economical, especially for low-technology assets, the client tends to undertake the entire procurement (including design sometimes) using such resources, otherwise, external labour, via labour-only agreements, may be used to procure the required capital asset.

Modern Methods

The modern methods are made up of two subgroups. The first sub-group houses what this paper calls the 'B-O-O-T' group and its variants with the acronym representing build, operate, own, and transfer. The essential components of this group of methods is that a private agency intermediates in the procurement of an asset on behalf of a public entity under a contract or franchise that is timeperiod bound, and with the private agency providing some or all of the finance and recovering investment through a lump-sum pay off, user charges, tax exemptions, etcetera. The second sub-group houses the design-build, design-build-maintain, design-build-operate, and design-build-financeoperate species. The essential ingredient here is that the private entity is responsible for facility design and production on behalf of the public body and may, in addition, only operate or maintain or finance and operate the resulting asset, recovering investment as agreed while title is retained by the public entity.

Post-modern Methods

The post-modern methods are products of this "age

of project management" (Maylor, 2003) and corporate relationship re-engineering resulting in the contemporary paradigm shift in procurement risk management, that is, from risk allocation and transfer to risk absorption and sharing. This shift has given rise to the models now recognized as alliancing, and partnering. The basic concept in these approaches is the pooling of resources in various forms by stakeholders according to their strengths and operating advantages and the recoupment is done pro-rata.

Following from the above, it can be said that the importance of public procurement lies in its constituting a significant proportion of the economic activity in most countries (Arrowsmith and Hartley, 2010). It can also be said that viewed technically, good public procurement goes beyond mere acquisition to include soundness of the process, which must incorporate transparency, integrity, and competition (Yukins, 2007) as probably the most important considerations. While transparency and competition are perceived as the hallmarks of global commerce (World Trade Organisation, 2008) the latter is seen as the cornerstone of public procurement (Office of Government Commerce, 2008).

Classification as "major or minor" notwithstanding, both government and private sector procurement suffer from fraud and similar issues" and go through the basic stages of "pre-procurement, tender process/contract preparation, and contract management with any chosen procurement approach being driven by repeatability, complexity, value and risk, and commonality" (Office of Government Commerce, 2008).

It also needs to be understood however that public procurement must contend with some challenges deriving from the market structure, legal framework, and political environment (Carpineti, et al, 2006) as part of the evolution process hence the constant need for reforms as exemplified by Nigeria's 'Due Process'

PUBLIC PROCUREMENT: NIGERIA'S 'DUE PROCESS' REFORM

Whereas banking reform in Nigeria can be said to have an appreciable history, the same cannot unequivocally be said about public procurement within which 'due process' can be pigeon-holed. The reason is simply that although public procurement did exist before the above named reform, it was mainly covered by the various interand intra-ministerial/public service rules and 'government orders'(GOs) under which the tenders boards of the various ministries, departments and agencies (MDAs) operated. Shrouded in the 'official

assigned a weight, and the weight so assigned was multiplied by the frequency of responses for that scale. The resulting product was then divided by the total frequency.

The second study population was valuation lecturers in universities offering courses in Estate Management in Nigeria to determine the level of teaching of annuity due modelling. The website of the Nigerian Institution of Estate Surveyors and Valuers showed that there are fourteen accredited Universities offering the course in the country. Nine (64%) of these institutions were selected purposively. The researcher employed telephone discussions with the valuation lecturers in these institutions to secure the required information. In addition, the researcher perused the standard curricula for valuation put forward by the National Universities Commission and the Nigerian Institution of Estate Surveyors and Valuers .

5.0 The Results

Valuation firm questionnaires were distributed in August 2009 while the interviews of valuation lecturers were conducted later in August, 2011. With regard to the valuation firm questionnaires, of a total of 189 questionnaires distributed, 80 were correctly completed and retrieved, representing a 43.3% retrieval rate. Most of the respondents were university and polytechnic graduates with B.Sc. or HND qualifications. The target respondent within each firm was the branch manager or the managing/principal partner of the firms. Generally the average respondent's firm was found to have been in practice for a period of about 11-15 years. First, the research sought to clarify the rent collection system for different types of property in the study area. The results are documented in the table that follows.

Table 1: Rent Collection System in Nigeria.									
Mode of Rent Payment/Types of Property	Office space	Banking halls	Shop space	Flats	Duplexes and houses	Tenement buildings	Lock - up shops in residential property		
Annually in Advance	78 (97.5%)	80 (100%)	39 (48.7%)	57 (71.25%)	70 (87.5%)	23 (28.75%)	23 (28.75%)		
Annually in Arrears	-	-	-	-	-	-	-		
Quarterly in Advance	2 (2.5%)	-	20 (25%)	15 (18.75%)	2 (2.5%)	21 (26.25%)	24 (23%)		
Quarterly in Arrears	-	-	-	-	-	-	-		
Monthly in Advance		-	21 (26.25%)	8 (10%)	8 (10%)	36 (45%)	33 (41.25%)		
Monthly in Arrears	-	-	-	-	-	-	-		
Total	80	80	80	80	80	80	80		

The responses in the above table confirm that rent in the study area is predominantly collected annually in advance excepting for tenement buildings and lock up shops in residential buildings which are mostly collected monthly in advance. A few respondents however indicated that rents for shops and residential property are collected quarterly and monthly in advance. It is noteworthy that in no case is rent collected in arrears.

Next, the researcher sought to examine the relative

importance of potential factors on why valuers continue to use ordinary annuity assumptions despite the knowledge that it does not reflect rent payment reality. A list of possible factors derived from literature was suggested to valuers in this regard, though respondents were also given the opportunity to suggest factors not included in the guestionnaire. Responses were measured on a 4point ordinal (Likert type) scale corresponding to strongly agree, agree, disagree and strongly disagree.

Table 2: Factors Responsible for Continuous Use of the Rent in Arrears Assumptions in Investment Modeling

Factors/ Reasons	Strongly Agree (Weight = 4)	Agree (Weight=3)	Disagree (Weight = 2)	Strongly Disagree (Weight =1)	Weighted Frequency wf	Relative Importance index
Non-familiarity of valuers with rent in arrears formulae (the model was not taught in Universities and Polytechnics).		22	4	2	140	3.18
Reluctance of valuers to adopt models that are not yet in popular use.	14	16	4	6	118	2.95
Non-availability of rent in advance valuation tables.	-	8	20	12	76	1.9
Rent in advance valuation tables are available but are not easily procured	-	16	22	8	100	2.17
Ordinary annuity calculations give accurate and consistent (even if inappropriate) opinions of value so why change a time tested model?		12	20	8	112	2.33
The rent in arrears model is the model clients understand.	-	8	24	6	78	2.05
Absence of regulatory instructions from the regulatory institutions (NIESV & ESVARBON) to practitioners to change to annuity due formulae		26	8	6	140	2.80
Practitioners are averse to the increasing complexity of annuity due formulae over ordinary annuity formulae		18	16	-	214	3.24
Non-use of DCF by valuation practitioners; DCF permits an easy transition from ordinary annuity or annuity due assumptions		20	20	8	108	2.25

The table shows that the three most important away with ordinary annuity assumptions. factors hindering a shift over to the more appropriate annuity due assumptions in investment valuation are the lack of guidance/directives to valuers by the regulatory bodies on the use of rent in advance assumptions, the lack of annuity due valuation tables and the perception that annuity due calculations involve substantial complexity.

Apart from the factors in the table, some respondents offered the following additional opinions as contributing to the reluctance to do

Some valuers felt that valuation accuracy is more dependent on the experience of the valuer in the market than on the model used. They suggested that where a valuer is sufficiently experienced in the local property market, it is unnecessary to adopt annuity due assumptions. This is of course not a correct position. Valuation accuracy is not just a function of experienced judgement. It is a function of four factors: correct data.

of deliberate policy response to perceived or impending, banking sector crises evident in Nigeria's case as persistent illiquidity, insolvency, under capitalization, high level of non-performing loans (NPLs), and weak corporate governance. In the same vein reform intervention can be summarized as liquidity support, consolidation and re-capitalization, structural support (bridge banks, asset management companies, etc), and outright liquidation (Uchendu, 2005).

The fundamental objective of reform is to reposition existing status to attain effectiveness and efficiency consistent with best practices in order to achieve consolidation, competition and convergence (Ajayi, 2005; Deccan and Herald, 2004).

The increasing global trend of privatization and deregulation especially in developing countries since the 1990s (Israel, 1992) indicates increasing scarcity of state funds for procuring capital public assets and hence the need for better efficiency and effectiveness in public procurement.

In Nigeria, public procurement has remained problematic caused by fiscal irresponsibility, corruption, absence of centralized control, paucity, and non-use, of qualified personnel, all leading to delays, over-runs (cost, time) low quality, and general dissatisfaction and astronomical cost to the economy.

It is against the above background that 'Due Process' came into being to reform. Since a greater proportion of 'Due Process' procurement concerns assets that are tangible and permanently fixed to land, it is only reasonable that the real estate professional be apprised of the relevant implications of the reform.

PUBLIC PROCUREMENT

Since the earliest recorded formalized public asset procurement in ancient Syria of 2800-2400 B.C (Thai, 2001), procurement has evolved into a simple theory with a complex process. It is also viewed as an abstract paradigm that represents the conversion of inputs into outputs and as such seen as one of the oldest transactions known to man (Burstone et al. 2007).

In the above direction, several views have been expressed about procurement ranging from the general to the specific and with varying emphases. The PPA 2007 sees it simply as acquisition. On the other hand, some sources tend to mix-up the concept of procurement with contracting strategy. and tendering/bidding which itself is a stage in procurement (Morledge et al. 2006).

The general group of views of procurement models the acquisition of goods and/or services at the best possible cost of ownership, in the right place and from the right source for the direct benefit or use of corporations, individuals or even governments generally via a contract (Wikipedia, 2010).

More relevant to this paper however is the view of procurement as a "full range of activities related to purchasing goods, services and works...and a process that does not end at the commissioning or contract award stage, but spans the entire life cycle of the product or service from inception and design through to contract management and disposal of any redundant assets (City of London, 2010). The above view captures the components of a process. life cycle and disposal (including sale) which this paper considers important components in real estate procurement and of great economic, political and legal significance (Arrowsmith and Hartley, 2010) if procurement must target economic development and citizen empowerment.

The 'disposal' in the above view clearly suggests the complete recoupment of investment in the procured asset and hence a recourse to the idea of going beyond the cost of procurement, to the valuation of the 'redundant assets' which can be done properly only by a valuer in the futuristic context of a market.

No wonder then that the Bureau of Public Procurement (2008) sees it as the "process by which governments buy inputs for vital public sector investments ... both in physical infrastructure...."

Following from the above, and by implication, procurement includes the ideas of buving/purchasing, hiring/renting/leasing, and manufacturing or creating goods (tangible) and services (intangible).

Based on the input/output paradigm earlier, inputs should be represented by financial prudence, technical soundness and equity in distribution. The output can be summarized as "government buying better" in a system model of inter-related components (Norton and Kaplan, 2001), forces (Thai. 2001), and demands (external, internal, context, and process) (Telgen, 2006) that make up the remaining system's components.

The process view of procurement presents it as comprising conceptualization, advertisement, pregualification, short-listing, invitation, tender action, and project execution (Olatunji, 2008). As a strategic element of purchasing (University College Dublin, 2010), procurement takes a number of forms which this paper thinks can simply be

DUE PROCESS AND PUBLIC PROCUREMENT IN NIGERIA: THE REAL ESTATE PERSPECTIVE

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Abstract

'Due process' is a public procurement reform encapsulated in the Public Procurement Act 2007 with the objective of economic efficiency and effectiveness consistent with best practices. The Act's definition of procurement as simply 'acquisition' tends to shift attention to goods and services only contrary to the fact that most public procurements deal with capital assets especially physical infrastructure. This paper therefore sort to determine if a real estate content exists, and the extent of that content, within the enabling Act and hence provide a real estate perspective to 'due process'. Based on a literature review approach, it was found that 'due process' still relies mainly on the out-dated traditional design-bid-build model with its major challenges including corruption, bureaucracy, and the absence of the real estate professional in the membership of NCPP and BPP. This paper's major conclusion is that beyond the functions that can be performed by the real estate professional, under the Act, its definition of "works" equates with land development and hence provides the clearest real estate perspective to 'due process'

Key words: due process, public procurement, real estate perspective, reform, works.

INTRODUCTION

Like many developing countries of the world, Nigeria is still grappling with the ever present need to increasingly empower its citizens economically. The above need has led the Federal Government of Nigeria to, overtime, institute different reform programmes. It is in the above regard that the banking, and public procurement reforms have gained attention in recent times with the latter dubbed 'Due Process' and encapsulated in the Public Procurement Act No. 14 LFN (PPA) 2007.

Attaining effectiveness and efficiency consistent with best practices have been seen as being central to reforms. Interestingly, 'due process' is concerned, in part, with ensuring "best value-formoney (VFM)" (Office of Government Commerce, 2008) in the procurement and disposal of public capital assets that substantially constitute real estate.

The public assets referred to above constitute real estate to the extent that the assets are tangible and immovable and/or permanently fixed to land with their ownership recognized by the laws of the land.

That procuring, and recouping investment in real estate is respectively capital intensive, and long-termed in nature is common knowledge in the same way as the existence of some inherent risks (Estache,2001). Whereas real estate investment requires proper and adequate financing, what is not quite common knowledge is the systemic intersectoral linkages arising from executing "works" (Federal Republic of Nigeria, 2007) and their tendency to empower the ordinary citizen, create employment and induce growth and development.

Practically, empowerment is the process which enables individuals/groups to fully access personal/collective power, authority, and influence, and to employ that strength when engaging with other people, institutions or society, and includes empowering previously disadvantaged sections of the population (Wikipedia, 2010). In the final analysis the exchange of goods and services must be done in cost or cost equivalent basis hence the need for financial intermediation (Imala, 2005), a role normally fulfilled by the banking sector of the economy (Adoghame, 2007).

Banking reform on its own can be seen as the result

correct assumptions, correct models and experienced judgement (Aluko, 2000). Some valuers are of the opinion that there is no significant difference in the valuation estimates arrived at using ordinary annuity and annuity due assumption models. They suggested that the question of use of ordinary annuity or annuity due assumptions is accordingly unnecessary. However, such opinions miss the point which is about rationality. As earlier pointed

out, an accurate and appropriate model is

always preferable to an accurate and model

With regard to the teaching of annuity models, the research proceeded to undertake a perusal of the

based on inappropriate assumptions.

National Universities Commission (NUC) prescription curricula of institutions offering estate management courses as well as the professional examination curricula of the Nigerian Institution of Estate surveyors and Valuers to ascertain the level to which annuity due modeling is prescribed. The perusal showed there is no explicit mention of annuity due modeling in valuation curricula at present.

The perusal was supplemented with telephone interview sessions with valuation teachers in nine of the fourteen Nigerian universities to obtain an insight into the teaching of annuity due modeling in investment valuation courses. The results are provided in the table that follows:

Table 3: Teaching of Annuity due Modeling in Nigerian Universities

Teaching of Annuity due modelling	Frequency
Lecturer not aware of annuity due modelling and therefore, annuity Due modelling not taught at all	1 (12.5%)
Lecturer aware of annuity due modelling, but considers it unnecessary to discuss or teach such modelling to students for now since the entire profession does not use annuity due, the difference in capital values from annuity due and ordinary annuity models is small and in any case, the comparison method is available as a cross check on ordinary annuity valuations	4 (50%)
Lecturer aware of annuity due modelling, and wishes to teach such modelling in class but is constrained by lack of annuity due model literature and tables	2 (25%)
Annuity due modelling sometimes taught as a topic for final year and postgraduate valuation courses, but ordinary annuity employed in the vast majority of valuation teaching	2 (12.5%)
Annuity due modelling taught and employed in all valuation teaching	0 9 (100%)

The results show that most (50%) of the respondent llecturers are aware of annuity due modelling, but consider it unnecessary to discuss or teach such modelling to students for now since the profession in Nigeria does not yet use annuity due modelling, and moreover, the difference in capital values from annuity due and ordinary annuity models is small. Another group of lecturers (12.5%) indicated that annuity due modelling is sometimes taught as a topic for final year and postgraduate valuation courses, but ordinary annuity employed in the vast majority of valuation teaching.

6.0 <u>A Case Study Showing the Difference</u> between Ordinary Annuity and Annuity Due Valuation

It was considered useful to demonstrate the differencebetween ordinary annuity and annuity due approachesby means of a Nigerian case study. Thecase study propertypresented a recently let 'freehold' 4 bedroom detached house in the high brow Victoria Island areaof Lagos metropolis with a rental value of 1 million naira per annum. Property rights in Nigeria are somewhat different from those in UK in the sense that in Nigeria, there is nationalisation of land, and freehold interests have

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been substituted by the 1978 Land Use Decree with 99 years certificates of occupancy. Nevertheless investment valuation in Nigeria takes the certificates of occupancy to be effectively the same as UK freehold interests. The mathematical justification for this is that the present value of N1 falls at an accelerating rate so that the difference in value between a perpetual interest and an interest for 99 years is insignificant.

Where rent is assumed received in arrears, the YP is derived using equation 3 and the valuation takes the following form:

N

 Rent reserved
 1,000,000 p.a.

 YP perp. @ 6%
 16.6667

 Capital Value
 16,666,700

Where rent is assumed received in advance, the YP is derived using equations 10 or 11, and the valuation takes the following format

Ν

Rent reserved 1,000,000 p.a. YP perp. @ 6% 17.6667 Capital Value 17,666,700

The rent in advance calculation in this case study is higher than that of the ordinary annuity calculation by a million naira. Obviously, the disparity in value arrived at between annuity due and ordinary annuity approaches would decrease as the rent being capitalized decreases. Most residential property in Nigeria do not attract rental income as high as in Victoria Island. Moreover, further calculations using two year lease terms (which are typical in Nigeria) show that the disparity in value arrived at between annuity due and ordinary annuity approaches would be much less as lease term decreases due to the effect of compounding.

7.0 Summary and Concluding Remarks

In the paper a number of issues have been clarified. First, it is confirmed that **e**state surveyors and valuers in Nigeria collect rent annually in advance for most types of property. Theoretically, the use of ordinary annuity assumptions is therefore clearly inappropriate. There is also an increasing tendency to collect some rent quarterly and monthly in advance, though, this is still an emerging situation in Victoria Island, Ikoyi and Lagos Island areas of Lagos. The emergence of monthly tenancies is noteworthy because as noted by Tipping (2006), valuers should not always assume that all properties display the same rent payment pattern. The valuer should ascertain which rent payment pattern is prevalent for the property he is valuing and adopt a valuation model whose assumptions capture the rent payment pattern.

It has also been confirmed that most firms use rent in arrears (ordinary annuity) assumptions even though this is in conflict with the Nigeria rent collection practice. Most respondents had some level of understanding that such modeling is based on inappropriate assumptions. Despite this, many respondent firms were of the opinion that valuations based on inappropriate annuity assumptions in Nigeria still produce accurate results. Nonetheless, they would like to see the entire profession move over to annuity due models, but expect that any movement toward such change must come from the regulatory bodies. The regulatory bodies in Nigeria have been very innovative in many areas but have hitherto not yet provided significant leadership drive in the direction addressed in this paper. This is probably because the regulatory bodies in Nigeria are not yet research oriented (as observed by Ogunba & Ajayi, 2007). The lack of research inclination is unlike the orientation of the RICS in the UK which regularly sponsors research into topical valuation concerns.

The way forward must involve the Nigerian regulatory bodies the Nigerian Institution of Estate Surveyors and Valuers and the Estate Surveyors and Valuers Registration Board of Nigeria sponsoring research into this important issue and taking whatever other measures are necessary (such as valuation information papers) to move the profession towards desired appropriateness in annuity models. For example it would also be necessary for them to consider empowering valuers in terms of the development of annuity due valuation tables. It is unlikely that the authors of Parry's tables would include conversion factors to cater for the rent patterns peculiar to erstwhile Commonwealth countries. It is therefore necessary for valuation regulatory bodies in former colonial Commonwealth like those in Nigeria to take the bull by the horns (as it were) by sponsoring the development of tables that are appropriate for the their own situation. Practitioners also need to be assisted to realize that the use of annuity due calculations does not involve as substantial complexity as imagined. Practical training demonstrations of the use of conversion factors from annually in arrears to annually in advance formulae can illustrate this graphically. The training demonstrations should ideally take the form of training workshops rather than the currently used style of Continuing Professional Development (CPD) seminars which presently are structured as lectures followed by question and answer sessions.

The low familiarity of the majority of Nigerian practitioners with the annuity assumptions underlying valuation techniques could also be linked to the nature and content of academic and

Intervention with Subsidies

From the application of subsidy as practiced in various countries again it is quite clear that we are virtually doing nothing. Massive doses of baskets of mixed subsidies have to be injected into our housing delivery and housing finance system. The excuse that there is no money is unacceptable because if the right approaches and techniques are applied by Government its expenditure would be reduced to the barest minimum.

CONCLUSION

For social housing financing and development to impact and assist in "integrating South-South for sustainable development" and be an imperative springboard for stimulating economic activities, job creation, eradication of poverty, reduction of corruption, improved national and state security resulting in the preservation of persons of the South-South; regard shall be had to the following:

the need for a paradigm shift in the mental and practical attitude by the leadership and followership in evolving implementable approaches to the whole issue of housing finance and development through a genuine commitment from Government at all levels and which must translate into effective practical **POLITICAL WILL** that up till now has not been demonstrated and can be said to have been absent in governance;

the development of uniform Land, Housing (including Social) and Urban Development reforms and Policies

the commencement of the elimination of the South-South housing deficit 2,401,614 by embarking on the building of 500 housing units in each of the six states of the South-South over the next ten years

funding housing development by all or any or a combination of the following approaches:

Annual Budgetary provision for the building of 500 housing units per annum per State. PPP and Pb Pb P that ensures that 25% of all new housing development are targeted for social (low cost) housing

establishment of "Shelter South-South" Grant through mobilization of the public and private sector for the sum of =N=20 billion creation of Joint Intervention/Economic Stimulus Housing Fund in the sum of =N=600 billion by government

intervention through the combination of variants of subsidies.

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7. Zero percent interest rate loan Housingaid Housing voucher Block grant for neighbourhood improvement 11. Mortgage package security Securitization 13. Provision of primary and secondary infrastructure 14. Supply of free land and exemption from fees to Estate Developers 15. Supply of land 16. Sales and renting below market value 17. Making it mandatory for a percentage of the houses built by Government/developers to be social housing (e.g.) in France 20% must be low-rent housing) Social Housing provision as a condition for planning permission to developers. 18. Group services (bulk purchasing, insurance, investment and information), provisions of all funds by government through banks as the provision of mortgages. 19. Provision of funding by (State Territory) Governments, providing assisted ownership-notably by non-profit organizations and Local Authorities. 20. Ensure that through subsidies, grants and other means that rents are below market levels. 21. State support to those who construct the **Dwellings** 22. Making available direct funding to dwellings dwellings afford market rents.

Take off grant for provision of housing delivery 24. Creditsupport 25. Subsidizing supply

France Finland USA

Sweden Austria

> Demark, Netherland, Germany, Singapore, South Africa and USA

Festac Town, Nigeria

Main land, China

Netherland, Germany, Singapore, South Africa, USA and in Nigeria where its classification is inadequate.

Hong Kong

United Kingdom

Brazil

Netherlands and Sweden

Ireland and England

Austria and France

France and Germany

De nm ar k, Ne th er la nd s, Ge rm an y, Singapore and South Africa with Nigeria indexed as being in the embryonic stage of this provision/practice.

Denmark, Netherlands, Germany, Singapore, South Africa and USA except Nigeria where the service is not available.

Denmark, Netherlands, Germany, Singapore, South Africa and USA have well developed scheme except in Nigeria where for all practical purpose the scheme is embryonic.

professional qualification curricula and textbooks. Presently, the curricula and textbooks employed in most of the higher institutions offering courses in estate management in Nigeria have a pre-1970 UK focus on ordinary annuity models and exclude the teaching of annuity due models. This need for valuers to upgrade their modeling calls for changes in the curriculum and academic programmes of the polytechnics, colleges of technology, and universities offering courses in estate management as well as in the post qualification professional apprenticeship training/examinations provided by the regulatory institutions.

In concluding, we will address the opinion put forward by some practitioner respondents that the present inappropriate practice (using rent in arrears assumptions) could continue. We have noted that this notion leans on three arguments. The first argument is derived from, observations such as that of Crosby (1992) that if all valuers in a market employ the same methods, an accurate valuation method tends to develop notwithstanding the inappropriateness of the adopted method. The second is that the impact of changing the formulae from ordinary annuity to annuity due is not very significant on capital value except where the rental value being capitalized is very large. The third argument is that ordinary annuity models need not be changed because the direct comparison method is available as a check on the reliability of ordinary annuity capital values These arguments have come credence and are worthy of consideration. With regard to the first argument, given that valuation is seeking to estimate what the next best buyer would pay for a property, if a valuer knows that the next best buyer will be advised by a valuer using what he thinks is an inappropriate method, can the valuer really use an alternative method to that used by his peers? The answer may be different in estimations Baum, of worth than valuation; in estimations of worth, one is posing the question "what am i prepared to pay?" rather than "what the next buyer is willing to pay?" Where worth is being estimated, a resort to annuity due modelling may be more appropriate. The second argument also has credence especially for situations where the rental value being capitalized is small, but what of situations where the rental value is more substantial as with the case study provided above (valuations in Victoria Island)? The third argument also has weight, where direct comparison is available. However, such evidence is not always Crosby, N. (1992): Reversionary Freeholds: UK available as lease structures of otherwise comparable buildings might vary very substantially.

The arguments for a continuation of the ordinary annuity assumptions all come down to the point that accuracy, or at least something close to accuracy, is

being achieved by ordinary annuity market valuations, if not for valuations of worth. However, in scientific thought, should the end be taken as justifying the means? Should irrationality be excused if it produces something close to accurate values?We believe the answer is no. The rationality argument for a collective change over to annuity due assumptions in Commonwealth countries is compelling, and the accuracy argumentsstated above should not prevent valuers from rationalizing their modelling by truly reflecting the realities on ground. Conservatism should not stifle a continuous drive towards increased appropriateness in professional modelling in Commonwealth countries. We accordingly submit that the valuation profession in all affected Commonwealth countries begin to realign their investment valuation techniques to model what actually happens in their respective countries, else they would never be at the cutting edge. Strong political will is required to demonstrate that Commonwealth valuers are after all thinking men, not creatures of habit.

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- Objectives of Nirsal

Stimulates innovations in agricultural **lending**

Encourage banks that are lending to the agricultural sector;

Eliminate state-dependency by banks for deploying loanable funds to agriculture;

Leverage commercial bank balance Sheets for lending to agriculture

Ensure risk sharing approaches.

- COMPONENT AND PILLARS OF NIRSAL

NIRSAL as a financing mechanism has the following five solution components:

- i. Risk Sharing Facility (RSF)
- ii. Insurance Component (IC)
- iii. Technical Assurance Facilities (TAF)
- iv. Bank Incentive Mechanism (BIM)
- v. Agricultural Bank Rating System (ABS)

Other examples of intervention fund extended were to:

The intervention fund grant to Nollywood so that the film making industry would prosper

Tax Defaulters.

Page 11, of the Daily sun Newspaper of 14th November, 2011 carried an article in which we were informed of tax subsidy provision by the Federal Government after reaching an "unholy" agreement with tax defaulting companies that cumulatively, sued the Federal Government over =N=170 billion tax default. After negotiation, the corporate organizations were asked to pay only =N=22 billion and thus were granted =N=148 billion subsidy.

Importers of petrol products through fuel subsidy

We are too familiar with this topical issue that discussion same is otiose.

I have gone to this length to clearly demonstrate that the catalogue of recipients of grants/intervention funds/economic stimulus package eliminates housing development finance and home ownership through housing WHY? Housing needs one form or the other of financial intervention, grant and economic stimulus package. The neglect in respect of housing should now end and a new down ushered in. Considering the multiplier effect development and home ownership financing can have on the economy, it is time for an intervention fund to be established just as has been done for agriculture infrastructure, transportation and industry An intervention fund of not less than =N=600 billion at the rate of =N=100 billion per each of the South-South States should be packaged and released to stimulate housing development and home ownership financing in the next twelve months. This is the way to financially integrate South-South States for sustainable development.

SUBSIDY

The Place of subsidy in Social Housing

The definition of social housing, already stated in the paper and as contained in the Revised National Housing and Urban Development Policy (2011) is surely in line with what was done in Festac Town, Lagos, because the production of the houses was facilitated by market forces and government used subsidy mechanism (i.e. the writing off of the cost of infrastructure, long amortization period at single digit interest rate) for distribution as social housing to ballot winners/allottees. Therefore subsidy whether by government, corporate organizations philanthropists, wealthy individuals, NGOs and faith based organizations, is most vital to the success of social housing.

Social Housing Subsidies: Variants

The variants of social housing subsidies, in many countries, include but not limited to the following:

TYPE OF SUBSIDY

- 1. Housing investment subsidy
- 2. Public aid grant to institutions which build accommodation for low income
- 3. Home improvement grants
- 4. Home ownership loans with concessionary interest rate
- Housing benefits
- 6. Tax credits

COUNTRY OF PRACTICE

Poland

Germany

Belgium

Spain

UK

Kenya

Kenya

Name of	Year	Amount (=N=)	Payable/Remarks
Intervention/Fund Agricultural Credit Guarantee Scheme Fund (ACGSF)	1977		Established by the Federal Government to induce deposit money banks (DMBs) to extend credit to farmers It provides 75.0 per cent guarantee in respect of bank loans granted for agricultural purposes in the event of default. As at April, 2011, the sum of N43.540 billion has been guaranteed with respect to 704,023 loans granted to farmers of various categories.
Interest Drawback Programme (IDP)	2003		Introduced to improve the rate of loan repayment under the ACGSF. Benefit of interest rebate of 40 per cent. A total of 1227,902 claims valued N720.641 million paid to farmers as at April, 2011
Agricultural Credit Support (ACS)	2006	N50 billion	Intervention was to deepen access to loans for agricultural purposes. Lending rate of 14% inclusive of all changes. Interest rebate of 6.0 per cent on loans by the CBN. From inception, the sum of N19.43 billion has been disbursed by banks with respect to 103 agricultural project. N844.28 million has been paid out by the CBN as 6.0 per cent interest rebate
Commercial Agricultural Credit Scheme (CACS)	2009	N200 billion	Scheme was established to enhance food security in Nigeria. Finances the development of large scale commercial agricultural value chain. At 9% interest rate inclusive of all charges. N122.01 billion disbursed to 139 (115 beneficiaries private projects/ promoters valued at N98.11 billion and 24 State Governments including the Federal Capital Territory (FCT) projects valued N24.0 billion) as at April, 2011.
Refinancing/Restructuring Small and Medium Enterprise (SME) Manufacturing Fund	April, 2010	N200 billion	Fund was introduced to fast track the development and revitalization of ailing small and medium enterprises through refinancing and restructuring of existing loan portfolio. Has a tenor of 15 years and an annual interest rate of 7 per cent repayable quarterly. 23 DMBs and one (1) development finance institution participated in the Scheme as at December 2010. N199.671 billion released to the Bank of Industry (BOI) for disbursement to 516 projects. N197.595 billion has been disbursed to 539 beneficiaries by BOI as at March, 2011.
The Small and Medium Enterprises (SME) credit Guaranteed Scheme (SMECGS)	April, 2010		Introduced to provide 80.0 per cent guarantee for credit granted to Manufacturing SMEs, agricultural value chain and educational facilities. To create more jobs and provides N100 million maximum loan facility with 5 years tenor to each beneficiary. Six (6) applications valued N273.5million were received while four (4) applications valued N227.5 million had been approved under SMECGS as at March, 2011.
Power and Aviation Intervention Fund (PAIF)	2010	N300 billion	Fund was introduced to provide long-term financial support to commercially viable airline operations and power projects in Nigeria. 15-year debenture investment in the Bank of Industry (BOI) for on-lending to eligible DBMs and DFIs one (1) per cent interest rate who in turn lend to promoters at a maximum rate of 7.0 per cent. 30 applications valued N222.5 billion received as at March, 2011. N102.055 billion released to BOI for disbursement to 14 applicants made up of 12 airline and 2 power projects.
The Nigerian Incentive Base Risk Sharing System for Agricultural Lending (NIRSAL)	9 th August, 2010		The CBN signed an agreement with the Alliance for a Green Revolution in Africa (AGRA). Design phase concluded on April 11, 2011. Now in pre implementation stage Mechanism to unlock financing to agriculture. Finances agricultural value chain. Affordable financial products to reduce the risks of lending by

ENHANCING INTERNALLY GENERATED REVENUE (IGR) THROUGH PROPERTY RATING: THE ROLE OF THE ESTATE SURVEYOR AND VALUER

by

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ABSTRACT

The role of Estate Surveyors and Valuers in sustaining rapid economic growth of any nation cannot be disputed especially in enhancing internally generated revenue through the provision of valuation data base for the assessment and collection of property taxes through property rating at the local government level and property registration administration by the state government. One of the statutory functions of government is to provide essential amenities for the well being of the citizen's. An efficient and effective public administration success is based on the availability of funds to run her annual budget. The upkeep of the environment especially sanitation, maintenance of public schools, hospitals, roads, drainage's etc are compulsory services that must be rendered by any government for the general purpose. All the above is based on valuation advice of Estate Surveyors and Valuers. This paper is aimed at evaluating the various strategies for enhancing internal generated revenue for the smooth operation of local government administration through rating valuations. The provision of sound valuation data base or valuation list on which rating assessment should be based is one of the numerous ways an Estate Surveyor and Valuer contributes to the national economic growth.

KEYWORDS: Internally Generated Revenue (IGR), Property Rating, Economic Growth, Estate Surveyor and Valuer.

Introduction

Internally generated revenues are money and nearmoney internally sourced by state and local governments in Nigeria other than money coming from the Federation Account, loans and other statutory grants. Property Taxation on the other hand, is a form of taxation levied on real and personal property, for example, estate duties, development tax etc. Umezurike (1996) listed the taxes relating to real estate possessions in Nigeria as follows (i) Property Rate (Tenement Rate) (ii) Capital Gains Tax (iii) Capital Transfer Tax, (iv) Estate Fee. (v) Stamp Duties on Real Estate Title Documents (vi) Withholding Tax on Rent (vii) Consent Fees.

Property Rating, is a local form of taxation levied on land and buildings, the proceeds of which are used for funding local government projects. It is an instrument for raising revenue so as to help in defraying some of the costs incurred by local authorities or urban councils in the provision and maintenance of infrastructure and other services within their areas of authority. The continued productivity of local governments depends upon the provision of urban infrastructure and social services, therefore it is necessary to plan and coordinate the levying and collection of the property rate, since it is the major source of revenue in the local governments (Nwachukwu & Emoh, 2010).

Property Rates

These are local taxes imposed by a Rating Authority on the ownership or occupation of a tenement within the local government area for the purpose of raising money to offset the expenses of the Rating Authority in the provision of services such as refuse collection, provision of parks, cemetery etc. The tax is based on the income from the property and consists of the amount of so much kobo in the naira

(Rate Nairage of the assessed value of the property).

Property Rating was first introduced in England under the Poor Relief Act of 1601 when rate was levied on the occupiers of lands, houses, coal mines and other forms of property for relief of the poor.

The first real attempt to introduce modern rating into Nigeria was made by CAPS 15 and 16 of the Laws of the Federation of Nigeria and Lagos 1958. Hitherto, rating practice was only limited to Lagos and few state capitals in the Federation. However with the promulgation of Local Government Reform of August, 1976 by the Federal Government every Local Government in the Federation became the Rating Authority for its area of jurisdiction.

Property Rating if properly administered is a 2. veritable source of revenue for the local governments in Nigeria. It has however some obvious implications on real property investment. It has been argued that higher rates often serve as disincentive to citizens to build modern houses of durable and permanent structure especially where the rateable value is based partly on the structure of the buildings. It is also further argued that directly or indirectly, the property tax in no small way contributes to the present high cost of shelter 3. especially in the urban areas like Lagos, Ibadan, Port Harcourt and other capital cities. The Land Use Charge Law 2001 of Lagos State is a case in point whereby high property taxes were introduced which gave rise to the sealing off of the premises of many companies for refusal to pay.

Procedure for Rating

On appointment of the appraiser and the adoption of a system of tenement rating within a rating area, the appraiser will be called up by the rating authority to inspect and assess all the rateable tenements within the area. When this is completed, it constitutes what is called the first general assessment. In the conduct of his activities, the appraiser is free to co-opt any such person that will facilitate his work. He is to serve a notice upon occupiers or owners of tenements calling on them to make available any information or records or accounts, required to expedite that conduct of the compilation of the list (Igwe Kalu, 1998). The next step is the physical inspection and referencing the tenement within the area. This is done by the appraiser and or his agent at reasonable hour in the day provided that not less than 24 hours notice was given in writing to the occupier.

After the inspection and compilation of information gathered in the process and the actual assessment

of tenement by the appraiser, the provisional valuation list is then prepared and sent to the local government council for publication and hearing of possible objections (Igwe Kalu, 1998).

Principles of Rate Assessment

In order to achieve an accurate and adequate property rate, there are rules and statues which should guide the exercise. Such rules are otherwise known as principles. Generally, there are five or more principles of assessment; they are as follows:

- The hereditatment which is the subject of assessment must be assumed to be vacant and to let. It is essential to assume that the hereditatment is available to let so that it may be possible for the hypothetical tenant to bid in accordance with the statutory terms.
- The hereditament must be valued in its existing physical state 'rebus sic stantibus'. A residential house must be value as a residential house, a shop as a shop and a factory as a factory comparing a shop with a dwelling house or factory is not proper. Rather, we must compare like with like. However, minor changes which do not materially alter the structure do not alter the position.
- Actual rents passing on comparable properties are best evidence of value but not necessarily conclusive. Assessment on comparable properties may be used as guide in the absence of a better rental evidence.
- 4. Occupation of a part is occupation of a whole. Where a particular tenant or landlord chooses to have a beneficial occupation of a part of the hereditament, the whole premises will be valued for rating purposes. For example, where a man occupies two rooms in a four bedroom flat, the house must be assessed as if it is wholly occupied.
- 5. Properties physically separated but known to be performing complementary functions are valued as a single Unit.

The Role of the Estate Surveyor and Valuer

The professional role of the estate surveyor and valuer flows naturally from the foregoing discussions on the procedure for rating and principles of rating assessment. The duties of the Estate Surveyor and Valuer (as an appraiser) in property rating are statutorily provided in the various Rating Laws and Edicts operational in the various states of Nigeria. Ogbuefi (2004) stated that an appraiser, using the appropriate basis of assessment and suitable method or methods of valuation, should assess the rateable value of

there is money for other things. Therefore it is simply not enough for a state to claim it lacks resources to achieve the fulfillment of social housing right. This position that the issue of lack of resources does not arise is justified by the fact that "available resources" must be equitably and judiciously used in the satisfaction of at least, the minimum requirements of the rights, particularly to the advantage of the most vulnerable sections of the population - there should be equity and fair play and housing sector should no longer be downgraded or left out in the priority of fund allocation.

The whole issue of not funding housing is ideological. It is influence by conservatism of the right and fueled by primitive insatiable accumulation of private wealth through "landlordism" operated by various strata of leadership and followership. Every Nigerian appears to have in-built into his make-up a capitalist tendency without a human face and the milk of human kindness. Subconsciously we act so as to preserve the status quo of the homelessness of our fellow Nigerians. Another problem we face in funding social housing is inability to commit funds to it based on "escapist mentality" that the problem is so gigantic and complex and multifaceted that we have to escape from reality and tackle the lesser of our problems the results of which we can see during the currency of the tenure of our political offices. Retreatism defeats funding of social housing.

International economic politics of the World Bank, the International Monetary funding and other multilateral donor agencies that advocate and dictate cutbacks on spending on housing and social services do constrain funding for the development and supply of social housing to our disadvantage in the growing of our economy.

The overall effect of these anti-housing development financing postures is that every other thing can be funded but not housing. Once there is advocacy for funding of housing development, there is automatic resistance and lack of interest. What is not realized is that funding of social housing is not as expensive to government as is often thought. Sometimes and depending on the delivery model, what is foremost is the provision of the enabling ecology (laws, regulations, institutional frameworks etc.) that will make the effort of the private sector (individual and corporate) to thrive and blossom. Therefore each State of the South-South should make and actually fund a budgetary provision for the building of 500 housing per annum at =N=5,000,000 per house inclusive of cost of infrastructure.

PPP and Pb Pb P.

The funding of social housing development is not to be undertaken by Government only. It is a joint effort through PPP and Pb Pb P. However, Government must show leadership: lead the way and the people (individuals and corporate bodies) will follow. It can be made mandatory for a percentage (e.g. 25%) of houses built by Government and developers through PPP and Pb Pb P to be social housing and also for low income persons. Social Housing provision in any estate development can be a condition for planning permission and allocation of land to developers

Special Fund Mobilization for Shelter Nigerians

The basic principle here is that special fund mobilizations has to be carried out because as moral beings an appeal to provide for the less privilege at cost to ourselves should elicit, response and support from Nigerians. In this respect, Nigeria as the "giant of Africa" needs to take "giant" revolutionary strides to restore the confidence of the people in governance for achieving the national goal of providing housing for all. Therefore progressive South-South States must take the lead. For this purpose Special Purpose Vehicle (SPV) shall be created which will, or the BRACED COMMISSION, design, implement and monitor a fund raising programme for housing (social) delivery to house poor Nigerians that are homeless in the Braced States. The Special Purpose Vehicle (SPV) or the Braced Commission will collaborate with State Ministries charged with responsibility for Lands, Housing and Urban Development, State Planning Commission, the MDG office and other relevant State Governments' Ministries, Departments and Agencies (MDAs), Local Governments, Organized Private Sector (POS), Housing Programme to Provide and wipe off the 2,401,614 housing deficit in the next ten years as well as promote sustainable planning of all settlements in the South-South and upgrading of slums. This South South housing programme to be tagged "Shelter South-South" will be designed to mobilize =N=20bn for the programme in the first instance. This fund will be mobilized through a promotional extravaganza supported by State Government. The mobilized fund will be used for providing social housing/low cost housing for the low income in all states of the South-South.

INTERVENTION FUND/ECONOMIC STIMULUS PACKAGE/GRANTS

Age Long Practice

The theory and practice of providing intervention fund for various activities in the Nigerian economy is not new. It is only intervention fund for housing development and ownership that there has been clever resistance to. Therefore, there has upto update been no intervention fund in housing all advocacy made notwithstanding. Some of the various funds' interventions made are:

be provided for the poor and other disadvantaged classes. Anything that deprives them of this is potentially dangerous and prepares breeding grounds for discontent, agitations, demonstrations, fanaticism, insurrections, militancy, terrorism and eventually revolutions that spare none. Provision of social housing promotes peace and security. Even the servants should feed from the crumbs from the master's table and the larger the crumbs and the more frequently they drop, the more contented would be the servants.

Social Housing: Legal right not a Privilege

Besides these moral aspects, social housing is a legal right not a privilege. For now this right may appear unenforceable. If it is remembered that the Ecowas Court recently adjudged against the Nigeria Government that the right to education, also enshrined in our constitution is an enforceable right. It ordered compliance by the Nigeria Government. Housing must surely tread this path of adjudication. The tide of legal action and enforcement would be slowed down if the society voluntarily provide social housing as appropriate.

Promotion of Good Health

Good social housing promotes health. A healthy cadre of those who benefit would greatly enhance/improve their service productivity, have reduction effect on investment in health care and rub off on the health of the elites whom they serve. Some of the consequences of not providing social housing and therefore leaving people to live in bad or overcrowded housing are: (Affordable Housing Strategy for Nigeria - Prof Prince Efere 2011)

Stress and worry

Frustration

Lack of concentration

Loss of self-confidence and self-worth

Low self esteem

It is difficult for children to study and learn

May cause behavioural problems in children

All kinds of diseases and infections

Frequent accidents at home

Crime

Mental illness

Political violence and unrest

Terrorism

Guaranty of Social Stability and Security

As no sane person burns down his own house; since the poor are awake because they are hungry; so the rich cannot sleep for they are busy observing/watching over the poor who may be planning to harm the rich and for ensuring sustainable urbanization and reduction in areas of

governance deficit; the provision of social housing guarantees peace, stability, security, promotes human dignity, social cohesion and environment sustainability.

Widening Range of Housing Options

Social housing provision contributes to the widening of the range of housing options available to the poor and will assist in the reduction of housing deficit in the States. The provision is a window of opportunity for governments at all levels to demonstrate their commitment to the provision of social housing as a social responsibility to the citizenry, thereby institutionalizing an efficient, responsive and sustainable mechanism for housing delivery.

Restructuring of the Society

As already stated, social housing provision contributes to the national thought of restructuring our society to addressing structural, economic, social and apparent dysfunctionlities. Therefore, it contributes to the vision of an economically empowered and socially integrated society living in sustainable human settlements.

Reduction of Slums and Stability of Property Values.

Social housing provision is a win-win undertaking for everybody. When provided, it keeps other urban property values stable through the reduction of slums etc.

FUNDING:

Funding Options:

The following funding options can be considered:

Budgetary provision by Government

PPP and Pb Pb P

Special fund mobilization through

philanthropy/Informal Sector

Intervention fund (Government/Private

Sector)

Subsidies

Budgetary-Yearly Provision Little or None

Those at various steps/positions of the ladder of governance for reasons best known to them do not generally want to fund housing talk less of social housing. Many times at Federal and State levels, little or no budgetary provisions are made. In the 2011, Federal Ministry of Lands Housing and Urban Development Budget provision was made for a total sum of =N=20,624,203,321 (=N=20 billion) out of which **ONLY** =N=9,000,000,000 (=N=9 billion) was earmarked for the provision of housing for over 140 million Nigerians and for commencing the attempt to reducing the 16 million housing deficit Even when there is budgetary provision, funds are not released because it is claimed that there is no money and yet

tenements in the various rating areas or in specified or part of specified rating areas. He went further to list out other duties of the appraiser to include:

- (a) Compiling a valuation list for a rating area.
- (b) Conducting general or sporadic revaluation of tenements or tenement for rating purposes.
- (c) Compiling and delivering the valuation list to the rating administration authority in good time to enable leving and collection of rates to be carried out for the financial year.

It is the duty of the appraiser to ascertain and reassess the value of every tenement, at least once in every five years (quinquennially) or such longer period as the law may prescribe. In other words, there shall be a new general assessment within a rating area every five years. In preparing the valuation list the Estate Surveyor and Valuer should employ the best methods of valuation appropriate to each class of property. The methods of valuation available to the valuer include rental comparison (Rental method), profits or accounts (receipts and expenditure) method, contractor's method, (Depreciated capital value method or the Replacement cost method), through-put method (a variant of the profit method), Royalty method.

The valuation list is the official list of all hereditaments with their assessed values and its preparation and publication should make provision for material change of circumstances. In other words, where after the appraiser has transmitted the list to the rating authority, but before the date on which the list would come into force, it appears to the appraiser that, by reason of the material change of circumstances which has occurred in the interim, the said list needs to be altered in any respect, the appraiser shall cause the list to be altered. Achange in the value of a property arising from structural alterations; total or partial destruction of rateable structure, subsequent event making a property liable to be rated or taking it off rating liability as the case may be; the development of a vacant site or the redevelopment of an under-utilized site or completion of a work-in-progress, a previously simply rated property becoming rateable in parts or vice-versa; subsequent enjoyment of remission, reduction or discount to rates or loss of enjoyment thereof, are among the circumstances that could warrant the sort of alteration to the valuation list (Ogbuefi, 2004).

Before the newly compiled valuation list can be adopted as the final document of reference for all rateable hereditaments in a rating area, it is essential and mandatory for the interim list to be displayed in an open place. This is to allow the public to see and for anybody with objections to do

so before the document is adopted statutorily. Where are objections, such objections should be lodged within specified period usually 30 days; and complaints are to be made in writing. Complainants have the right to engage the services of estate surveyors and valuers to plead their cases especially on objections relating to the amounts arrived at as the rates payable. Where there are corrections to be made and they are made, the valuation list is closed by the appraiser's signature and adopted as the current valuation list. In the case of a new or altered hereditament, the list will be altered accordingly. This is known as toning the valuation list (Tone of the List).

The Estate Surveyor and Valuer is duty bound to assist the rating authority in determining the Rate Nairage. The Rate Nairage is the multiplier when applied to the rateable value will produce the figure of property rate payable by a rate payer in any financial year.

The Estate Surveyor and Valuer should also sit in the Property Rating Appeal Tribunal as a member in other to give expert opinions and technical advice as the case may be.

The Emerging Trend

The paucity of revenue from land related source probably informed the Anambra State Government's decision to initiate a harmonized property and land use charge known as Anambra Property and Land Use Charge (APLUC). APLUC is harmonized Property Rate, Ground Rent, Tenement Rate. Infrastructural Development and maintenance levy. It is a drive by the Anambra State government to get more revenue from properties for which they feel are undertaxed. The Lagos State Land Use Charge Law 2001 was a consolidation of a number of existing charges namely Land Rates Law, the Neighbourhood Improvement Charge Law and the Tenement Rates Law into a new land-based charge aimed at rationalizing land charges that were not being efficiently collected and which proceeds were subject to losses and abuse.

Apart from the fact that both the Anambra and Lagos States Laws are incompatible laws that tend to consolidate property rates, ground rent, maintenance levy and infrastructural development levy into a single land charge under a single administration/management, they tend to usurp the traditional role of the estate surveyor and valuer. Tax Consultants, Chartered Accountants and all manner of revenue consultants/personnel are now engaged by these state governments to assess and levy these land charges and they only employ estate surveyors and valuers to handle some limited

aspects of the assignment like collecting field data and giving of opinion on the capital values of the properties clearly. The Laws clearly show a poor appreciation of the concept of property rating, the elements of rateable occupation/ownership and the basis, principles and methods of rating assessment as well as the original and tested concepts of the different forms of land taxation. In the words of Ogbuefi (2004) property rating must be made to retain its unique and original import in character and procedure of assessment. And I wish to add that the professional estate surveyor and valuer must play a leading role in all aspects of property rating assessment and administration including the revenue collection.

The Way Forward

Public revenue in Nigeria is inadequate and unstable. The major cause of revenue volatility is a combination of two factors: the large and unpredictable fluctuations in oils revenue and the large share of oil revenue in total revenue. In the short run efforts should be made to raise more revenue through effective harvesting of existing sources and more imaginative investigation and development of new ones (Ukwu, Obi and Ukeje (2003). Land value taxation should be one of the new revenue-generating options that should be explored by the state and local governments in Nigeria.

Poor or inadequate information on rateable areas, rateable properties and rateable owners are major impediments to efficient property rating administration. There is the need for a good Land Information System (L.I.S.) modelled on a broader basis from the Geographical Information System (G.I.S.) but specifically designed for the needs of the estate surveyors and valuers.

There is also the urgent need to widen the revenue generation base of the state and local governments through the introduction of Land Value Taxation. This will require new legislations and the enabling instruments for effective implementation. According to Emoh (2011) land taxation would require completion of land registers, a parcel-based property gazetteer, and reform of the planning system so that every land site could be known and hence each site could be assessed fairly. Land value maps would be used by the tax authorities themselves internally to maintain tax assessments and externally to inform tax payers in a transparent manner as to their liabilities.

Land value maps visualization would facilitate the link between property values and infrastructure spending to become more transparent. Other property market players such as owners and occupiers of hereditaments would be also become better informed and likely to demand more up-todate statutory valuations to enable more consistent, robust and transparent decisions of their own. The best prospect for a land value map implementation will therefore be through a commitment to land value taxation (LVT). There is therefore an urgent need for the states and local governments in Nigeria to sponsor academics and notable professionals that will develop and produce land value maps using advanced technologies provided by Geographical Information Systems (G.I.S.) which can handle and process large amounts of spatial data, in order to enhance their internally generated revenue assessment and collection machinery.

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Nigerians."

Need for Paradigm Shift

Sadly, 10 years after this "noting" there has been no evidence found that development of substance has taken place. Almost everything for housing delivery is in place or can be put in place effortlessly except political will. This lack of political will has affected other wills through disillusionment. These wills are the will of finance development, creating legal, institutional, administrative, judicial, legislative, professional frameworks for housing delivery. The appeal to Government and those in authority at all levels is for demonstration of practical, effective and sustainable will in ensuring housing development. There has to be a paradigm shift in our thought process and action on housing production.

No Land Policy, No Housing Policy and No Social Housing Policy

Most, if not all of the States in South-South have no Land Policy, No Housing Policy and No Social Housing Policy. Even at the Federal level, there is no land policy and social housing policy. The extant policy on National Housing was made in 1991. The Revised National Housing Policy presented to the Hon. Minister of Lands, Housing and Urban Development on 10th October, 2011 is yet to be approved and adopted as a national document. It is very important and urgent that each state develops

and sewage are estimated at not less than 40% higher than the cost of erection of the conventional. Therefore for the superstructure and infrastructure.

Land, Housing and Social Housing Policies.

One of the reasons why persons in the South-South

cannot house themselves is because of the harsh

terrain with which they live especially in the Niger

Delta with particular reference to the mangrove

areas and the swamps of the Delta. Cost of

construction of the infrastructure and the buildings

themselves are very, very high because the terrain

is found generally to be swampy and water logged

most of the year. In these areas almost every land

for building purposes has to be reclaimed and

special riverine drainage and sewerage systems

are required. The indices show that the cost of

providing infrastructural services (secondary and

tertiary roads, water supply, electricity, open drainages and sewage systems) per building is

approximately 70% (Seventy per centum) more

than the cost of erecting a convential building.

Again, the cost of reclamation, riverine drainage

Harsh and Unbuildable Terrain

the cost is 110% higher than the building on a friendly terrain. Then if cost of substructure of the building at 40% is factored in, the cost is 150% higher. The situation in the swampy area is also applicable with relevant modification to erosion

INGREDENT IN HOUSE CONSTRUCTION

1. **INFRASTRUCTURE**

- 1.1. Land
- 1.2. Roads (Secondary and Tertiary)
- 1.3. Electricity
- 1.4. Water

2. **SUB AND SUPERSTRUCTURE**

3. OTHER WORKS

- 3.1. Land Reclamation
- 3.2. Drainage and Sewerage System

(%) PERCENTAGE MARKE-UPIN CONVENTIONAL BUILDING COST

prone areas as well as other hostile areas that

70% 110% 40%

Whom Social Housing is for

By now, it is clear that social housing is principally and primarily for, even though not limited to, the poor and less privileged and disadvantaged. Because there is a tendency to neglect and forget this voiceless group; we must go out of the way to cater for their housing needs in obedience to the biblical injunction that "what you do to these, you have done for me." It has already been pointed out in this write-up, that the society has a moral and social contract with this target group to provide social housing for them. This is in conformity with

the spirit of UBUNTU (to be human and humane, welcoming, hospitable, warm and generous with a servant spirit that affirms others and says "I am because you are; you are because I am") rooted in the duty of care and; as I have said already; founded in the Christian principle of being our neighbours keepers as examplified in the story of the Good Samaritan.

150%

Elite Survival and Housing for the Disadvantaged

It is necessary for elite survival that social housing

"How else can one draw and focus attention on the pivotal role of housing in development than these examples? Sadly, in Nigeria and over the years, all efforts to draw the attention of the appropriate authorities at all levels as to the importance of the provision of Mass Housing as a crucial and critical factor in the development and progress of the nation have not received the deserved attention. The financial rescue operation of \$700 billion into American financial system being an indirect subsidy to 'home-ownership-through mortgage' may be an eye-opener to those who underplay the imperative of government intervention in the housing delivery. The lesson is clear in injecting money into housing and real estate development you will create a productive economy, eradicate poverty, eliminate unemployment, banish social unrest and further enhance sustainable development. Simply put, housing provision promotes economic development and opens the door to the establishment of related industries and the creation of employment through its backward and forward linkages."

The chain of the provision of Mass Housing is as follows and the various job opportunities that could be created in this process are as in **APPENDIX 2**:

Preconstruction stage site acquisition, the input of the professions in the built environment.

Site Preparation including Infrastructural development.

Development of Housing Units.

Facility Management (Maintenance of both Infrastructure and the Housing Units).

From **APPENDIX 2**, it is quite clear that an overall workforce of 2,814,000 per annum can be created in Nigeria if every year we build a 1,000 housing unit estate in each of the 36 states of the Federation and FCT.

Consequent on the submissions made and as above, the communiqué issued by the National Economic Management Team (NEMT) after the Presidential Job creation Summit organized by it on 12th April, 2011:

Observed that

"the housing sector is a political job creating sector given the high demand for housing especially amongst the low income groups in the country" and confirmed that the number of jobs to be created "in the Housing Sector an estimated 3 million jobs will be created via the construction of 1,000 houses per state and then 14 million with the construction of 5,000 units per state including FCT."

The Key that will unlock "integrating South-South for sustainable development" is the financing and

developing of social housing in the states of the South-South.

Lack of Housing Development

Social Housing is important and needing immediate attention in the South-South because of general lack of sufficient housing development as well as the large pool of unemployed youths. This has been due to general governance deficit, general governance failure and incompetently weak institutions. Both at the national (Federal) and state levels, our present financial, legal, institutional, administrative, judicial, legislative, executive, political and professional arrangements for meeting the housing needs of Nigerians have become completely inadequate, unsatisfactory, ineffective and probably have collapsed.

Therefore what is now needed is immediate comprehensive result oriented, fundamentally radical overhaul, surgical reform and transformation for revival/creating new approaches to rescue the situation by delivering social housing buildings. Paralysis in housing development is also due to lack of or deficient knowledge and inability to comprehend the complexities of housing development and ownership mechanism. Everyone thinks that because he lives in or hopes to live in a house, he knows everything about housing; could plan and build his house to his taste; could maintain same and manage its environment these common assumptions are far from the truth and fallacious.

Political will Lack of and Leadership

Another factor that has slowed down our drive to social housing is the lack of genuine commitment and enthusiasm on the part of our leadership at all levels. This raises the important issue of **POLITICAL WILL** and **LEADERSHIP**. The lack of political will has been repeatedly addressed in various reports to government and subsequent Government White Papers without obtaining the desired response. For example, in 2001, the report of the Committee on Urban Development and Housing observed:

The policies and programmes of successive Governments did not satisfy the quest of the average Nigerian for housing principally due to lack of political will. Consequently, emphasis for obtaining better results shall be placed on the strategies for successfully achieving the goal and objectives of this new housing policy by all parties. Government noted this observation and stated that Government should

"Develop and sustain the political will of Government for the provision of housing for all

APPROPRIATENESS OF COST METHOD IN VALUING INCOME PRODUCING PROPERTIES FOR BANK LOANS IN ABUJA, NIGERIA.

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ABSTRACT

This paper examines the appropriateness of the cost method of valuation (used for valuing specialised properties) in assessing income producing properties for bank loan in Abuja, Nigeria. Structured questionnaire were administered on 107 Estate Surveying and Valuation firms and 18 licensed commercial banks in Abuja out of which 86 and 16 questionnaire were retrieve respectively for the analysis. The data collected were analysed using the Mean Score and t-test statistics. The results show that for the properties valued using the cost method, the confidence intervals are above 0.00, which implies that the valuation figures were higher than the sales price at the time of foreclosure. The result further showed that income producing properties valued by using the investment method have their confidence intervals below 0.00 (valuation figures are below the sales prices on foreclosure). The paper recommends that the cost method should not be used in valuing income producing properties.

Keywords: Cost method, Ioan, Performance, Properties.

1.0. INTRODUCTION

In carrying out a valuation for Mortgage purpose the ordinary principles of valuation applies. The Estate Surveyors and Valuer ensure that in the case of default by the mortgagor, the mortgagee's fund is secured (Johnson et al, 2005). To realise the security in the future, the sales price as at the time of valuation must be sufficient to cover the mortgage debt, arrears of interest and costs, or else the mortgagee will suffer loss. Therefore it is imperative that the value of the security be ascertained using appropriate methods of valuation and the predicted price reflect that market behaviour. In practise the valuation methods available are the comparative, investment, cost, profit and residual methods. Residual method involves the valuation of properties that have development potentials whether green field site or obsolete building. Profit method on the other hand is used to value properties which are specialised and have limited potentials for conversion to alternative use other than for running a business. While the investment and comparative methods are used for commercial properties that can generate income, the cost method is used for specialised properties (police stations, mosque, churches, town halls and duck yard) which cannot generate income and does not change hands often in the market place. The choice of approach (method of valuation) depends on the type of property, clients' purpose and data at hand; the information gathered will assist in arriving at the market value of the property (Wyatt, 1997; Gyamfi-Yeboah and Ayitey, 2006). The market value of the property will enable the lending institutions to know how much can safely be advanced and expect to recover in the event of default (Alico, 1993). As such, when a valuer is commissioned to assess the security offered for funds secured by a mortgage, the valuation methodology used to determine how the funds can be recovered by the mortgagee is very important (Lawson, 2008). In Nigeria, the principal methods used in the valuation of income producing properties for mortgage purpose are the comparative and the cost method (Ogunba et al, 2005). If this is the case, the question therefore arises whether the cost method gives an accurate estimate of market value when valuing income producing properties for mortgage loan? If the property is foreclosed, is the sales price higher than the valuation estimate quoted in the valuers report? These are some of the questions addressed in this study.

The remainder of the paper is organized as follows. The next section (section 2) deals with the review of existing literature on the subject matter. The review is followed by discussion of the research method employed with the results presented and analysed in section 3 and 4. The paper concluded with summary of findings, recommendation and conclusion in section 5.

2.0. REVIEW OF LITERATURE

Cost Method of valuation determines the value of property by reference to the cost of replacing or procuring an acceptable substitute (Ifediora 1992; French and Gabrielli, 2007). It is a Method based upon the premise that the value of a property is approximated by the investment necessary to replace that property (Acks, 1995). The approach seeks to determine the value of property by aggregating the costs involved in its development (Ogunba et al, 2005). The problem with the cost method is that it is generally, not easy to derive the information base required for a market approach to assess the value (Sayce and Connellan, 1996; French and Gabrielli, 2007). Values arrived at by Cost Method are often too high as a result of blind reliance on an over simplified methodology (Ajayi, 1997). According to Lawson (2008) the cost method of valuation ostensibly is a calculation of the cost of replacement and can be misleading. Ajayi (2009) confirmed that the replacement cost are often unrelated to market prices and that the use of cost method for mortgage valuation by some Estate Surveyors and Valuers in Nigeria frequently provided over estimation of market values especially when the properties are income generating ones (investment properties). Ogunba (1997) linked the non performance of security used as a cover for loans on the valuers method especially the cost method which is adopted for virtually all types of properties in Nigeria. For instance, the recent bank consolidation in Nigeria can be linked to poor performance of loan transactions resulting from inability of banks to recover loan advanced on property investments. This no doubt may be because of the method of valuation employed.

Aluko (2000) carried out a study on the accuracy of mortgage valuation and subsequent sales prices of foreclosed properties. In the study, Bank records of mortgage valuations conducted by fifty nine (59) firms of estate surveying and valuation in Lagos metropolis were examined. The sales prices of the properties were compared with their earlier valuation estimates and analysed by using the regression model. The study concluded that valuations in Nigeria are a good proxy for price. The study is generalised and did not consider the method of valuation adopted for the mortgage valuation.

Bello and Bello (2007) engaged fifteen estate surveying and valuation firms to value three recently purchased properties in Akure, Ondo state for sales and mortgages (with the required loan amount revealed to the Estate Surveyors and Valuers in some cases). Subsequently, the valuation estimates and the actual purchase prices were compared. The dispersion between the valuations and the purchased price were analysed and tested using t statistics. The result showed that the firms produced valuation figures that were significantly higher than the sales price. For mortgages all the valuation figures estimated were far above the revealed amount of loan sought by the client because of inadequacy in the use of the cost method in valuing investment properties.

In the developed countries also, Crosby et al (1993) observed cases of loans which could not be realized as a result of security asset which were sold substantially below valuations. However, Baum and MacGregor (1992) blamed this on the inability of Valuers' method to adequately represent the market prices or serve as a measure of security for bank loan

3.0. DATA SOURCES AND METHODOLOGY

The data for the study was collected from a sample of 107 firms of estate surveying and valuation and 18 licensed commercial banks in Abuja, Nigeria. The number of estate surveying and valuation firms were taken from the 2011 Directory of the Nigerian Institution of Estate Surveyors and Valuers (NIESV), Abuja branch. In addition, the list of the 18 licensed commercial banks were taken from the Abuja Business Directory (2011). Therefore, a total number of 125 questionnaire were administered on the target population in the study area out of which eighty six were retrieved from the Estate Surveyors and Valuers in the firms and sixteen from the licensed commercial banks representing a total of 77.86% response rate for both population. The questionnaire administered on the registered firms of estate surveying and valuation was structured to gather information on the accuracy of Cost Method of valuation in valuing income producing properties used as security for loan among others. Questionnaire for the commercial licensed banks was administered to elicit information on whether the Valuers' figure on properties valued was above the sales price of the property during foreclosure.

The data collected were analysed using the Weighted Mean Score and t test statistics. The t test statistics was used to test the performance of cost method in assessing income producing properties used as security for bank loan. In this wise, the prices of properties using the cost method

transport and by stimulating job 6. opportunities to emerging entrepreneurs in 7. the housing services and construction 8. industries.

- (4) ensure the involvement of residents in the Social Housing Institution (SHI) and/or key stakeholders in the broader environment through meaningful construction, information sharing, education, training and skills transfer.
- (5) ensure tenure for the residents in social institutions, on the basis of the general provisions for the relationship between residents and social housing institutions.
- (6) support mutual acceptance of roles and responsibilities of tenants and social landlords, on the basis of the general provisions for the relationship between residents and social housing institutions.
- (7) be facilitated, supported and/or driven by all spheres of Government.
- (8) promote the creation of sustainable, viable and legally independent housing institutions responsible for providing and/or developing, holding and managing social housing stock.
- (9) ensure transparency, accountability and efficiency in the administration and management of social housing stock.
- (10) must promote best practices and compliance with minimum norms and standards in relation to the delivery and management of social housing as a sector.
- (11) promote the use of public funds in such a manner to stimulate and/or facilitate private sector investment and participation in the social housing sector
- (12) promote housing delivery for a range of income groups (including, inter-alia no-income, low income, middle income, emerging middle class, working class and the poor) in such a way to allow integration and cross subsidization.

SOCIAL HOUSING IN THE SOUTH-SOUTH: WHY?

What is the imperative of social housing in the South-South? Why is social housing important and needing immediate attention in the South-South? The reasons are:

- 1. Economic and employment stimulus.
- Lack of housing development.
- 3. Lack of political will
- 4. Need for paradigm shift
- 5. No land policy, no housing policy and no social housing policy

- 6. Harsh and unbuildable terrains.
- 7. Whom is social housing for?
- Elite survival and housing of the disadvantaged.
- Social housing is a legal right not a privileged.
- 10. Promotion of good health.
- 11. Guarantying of social stability and security.
- 12. Widening the range of housing options.
- 13. Restructuring of the society.
- 14. Reduction of slums and stability of property values.

Economic and Employment Stimulus:

The provision of social housing is the starting point for the economic stimulus of any state as its multiplier effect on the economy is both horizontal and vertical. The forward and backward linkages associated with housing provision facilitate socioeconomic development and unlock other complementary benefits to the economic in the realm of wealth creation, employment generation, stimulation of investment flows and value-addition arising from the use of alternative building materials and adoption of home grown technologies.

The declared vision of the Federal Government is:

"To make the housing sector one of top 3 contributions to the nation's economy by adding 10 million decent and affordable homes to the national housing stock in the year 2020."

The following submission was made to the Presidential Summit on Job creation held on 12th April, 2011 as to job creation in Nigeria through the Housing sector and viz:

"America came out of the great depression of the 1920s by undertaking massive construction particularly the provision of housing. Recently, we witnessed the near collapse of the world financial system-capitalism and the western way of life was threatened which started from the mortgage-house building and purchase business-section of the American economy traceable probably, to the mismanagement of the production and purchases of houses. Housing is one of their largest industries with 8.3 million workers. The US Housing market has a direct effect on 122 downstream industries; there are approximately 150 careers involved in building a home. Housing accounts for 15% of USA Gross Domestic product [GDP] in a year. A typical 100-housing units project over a 10 year period in an average city generates 559 jobs, \$161.7 million in local income and \$25.5 million in local taxes and fees.

Organizations (NGOs) Community Based Organizations (CBOs) and Faith Based Organizations (FOBs) to build or facilitates the building of social housing estates as part of their corporate social responsibility with possibility incentives by Government;

- (vii) encourage States and Local Governments to engage the services of Architects and the Nigerian Institute of Architects to make available to the Low-income groups a variety of standard Architectural designs to meet different socio-cultural needs. Such designs shall be accepted as approvable plans, with considerable concessions on approval fees and formalities;
- (viii) ensure that States and Local Governments implement Social Housing projects that have approved Land-Use and building designs to meet different socio-cultural needs with considerable concessions on approval and other fees;
- (ix) encourage the establishment of Housing Co-operative and Associations, self-built construction and locally-sourced building materials. Co-operative Societies and Housing Associations shall have access to the funds of the Federal Mortgage Bank of Nigeria through the primary Mortgage Institutions:
- (x) Support and encourage the inclusion of Community Urban Upgrading programmes.
- (xi) ensure the establishment of appropriate institutional machinery in all communities for efficient maintenance of infrastructure; and
- (xii) encourage and support through Housing Co-operatives and Housing Association in the provision and maintenance of low-income housing in decent, safe and healthy environment.
- (xiii) all tiers of Government especially at State and Local Government levels should specially allocate/done land for no-income, low-income housing estates and mobilize recipients for effective housing development;
- (xiv) encourage the promotion, establishment and sustainable of the concept of co-operatives and housing associations through whose activities in organizing labour groups as teachers, nurses, clerical staff of public and private sector organizations, civil servants etc, the housing needs of the low income shall be met. Here the emphases is on mobilization and the investment of "Sweet Capital/Equity."

Social Housing Policy

Even though social housing is mentioned in the Draft Revised National Housing Policy, there is need for a more detailed policy contingent on which implementation programme will be based. I am not aware that such a policy exists at Federal and State levels.

Overall Purpose of Policy

A Social Housing Policy should outline Government's proposed range of options, interventions as overarching approach to stimulate the development of the sector. The overall purpose of the policy is to establish mechanism in terms of which government can create an enabling environment for the development, delivery and maintenance of the social housing sector required to deliver housing opportunities in the context of **MASS HOUSING.**

In order to achieve this, the document shall provide for creation of institutional framework for the administration of social housing; funding mechanisms for the sector to ensure that institutions are adequately funded to the point where their growth become organic and would no longer require further subsidization and administrative, legal as well as regulatory framework based on best practices. Therefore, the specific objectives of the policy documents should include the following, among others and to:

- define key to ensure common understanding and synergy in the in the sector
- lay down general principles for the social housing sector
- define the legislative, institutional and regulatory environment in which the sector will operate
- provide for a Government as well as private sector funding mechanisms for social housing
- promote capacity building in the sector providing measures to encourage the sustainability and growth of the sector.

Social Housing Policy Principles of

Therefore the following principles shall underpin social housing policy of Governments at National and State levels.

- promote the social, physical and economic integration of housing development into existing urban and/or inner-city areas through the creation of quality living environments.
- (2) be responsive to local housing demand.
- support the economic development of low income communities by ensuring that they are close to job opportunities, markets and

and investment method and their values when sold on foreclosure were analysed using test for difference between two population mean. The t-test statistic is as stated below:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S\bar{X}_1 - \bar{X}_2}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where $\overline{\mathbf{X}}_1$ and $\overline{\mathbf{X}}_2$ = sample mean for variable

1 and 2 respectively.

 $S\overline{\mathbf{X}}_1 - \overline{\mathbf{X}}_2$ = Estimate of the standard error.

 $n_1 - n_2$ are samples sizes from the first and

second populations.

 S_1^2 and S_2^2 is the variance for the first and

second populations respectively.

 $n_1 - n_2$ - 2 = degree of freedom.

The alpha (á) level = 0.05.

1.0. DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1. Frequency of Valuation and

Methodology used.

The frequency of carrying out valuation and the methodology used in practice are detailed in table 1, 2, and 3.

Table 1: Frequency of carrying out valuation (Quarterly)

Purpose of Valuation	Never (1)	Rarely (2)	Often (3)	Very often (4)	Mean Score	Ranking
Sale	25	29	19	13	2.23	2
Insurance	44	30	80	04	1.67	7
Mortgage	06	13	32	35	3.12	1
Rating/Taxation	28	34	15	09	2.06	4
Purchase	28	26	23	09	2.15	3
Compensation	34	28	17	07	1.97	5
Probate	26	43	13	04	1.94	6

Source: Field survey, 2012

Table 1 shows that the Estate Surveyors and Valuers carry out valuation of properties on a quarterly basis. Valuation for mortgage purpose was rated highest with a weighted mean score of 3.12. This was followed by valuation for sale and purchase purpose with mean scores of 2.23 and 2.15 respectively. Valuation for insurance purpose was the least rated by the respondents with a weighted mean score of 1.67. The result is in conformity with the findings of Lawson (2008) that bulk of the valuations carried out for commercial purposes by Estate Surveyors and Valuers are for mortgage.

Table 2: Most Realistic Method of Valuation used in valuing Income Producing Properties for Mortgage.

Method of Valuation	Number of respondents	Percentages
Comparison	00	00
Cost	00	00
Investment	86	100
Profit	00	00
Residual	00	00
Total	86	100
Source: Field Survey, 2012		

In Table 2, all the respondents (100%) noted that the investment method of valuation is the most realistic method in the valuation of income producing properties. The implication of this is that the valuation practitioners are knowledgeable about the theoretical principles of valuation which describes the investment method of valuation as the appropriate method in the valuation of income producing properties for mortgage purpose.

Table 3: Method of valuation used in valuing income producing properties for bank loan in the study area

Method of valuation	Number of respondents	Percentages
Comparison method	41	47.67
Cost method	32	37.21
Investment method	13	15.12
Others	00	00.00
Total	86	100
Source: Field Survey, 2012	2	

The result in Table 3 showed that the comparative and the cost method of valuation are used by 47.67% and 37.21% of the respondents in the valuation of income producing properties for mortgage. 15.12% of the respondents used the investment method in valuing income producing properties for mortgage. The use of the comparative and the cost method is not unexpected as most valuers in Nigeria adopts the comparative method of valuation in valuing properties and uses the cost method as a check. The comparative method though used by majority of the respondents; the information needed for its use are usually kept in secret hence, valuers resort to the cost method since the variables (area of building, cost per meter square of the building and the value of the land) required in carrying out the valuation are easy to determine and are realistic in the present inflationary economy of Nigeria. The use of investment method by lesser population of the respondents is contrary to expectation as the method is mainly used for income producing properties as shown in Table 2. According to Ajavi (2009), the investment and comparison approaches are most relevant for mortgage valuation purposes

especially for income producing properties. While the former reflects the income generating capability of the assets in an event of mortgagor's default the latter approach gives a clue on realizable market price at

4.4. Factors Responsible for the use of Cost Method in the Valuation of income producing properties.

Table 4 shows the factors responsible for the use of cost method by the Estate Surveyors and Valuers in valuing income producing properties especially for mortgage purpose.

Table 4: Factors responsible for the use of Cost Method in the valuation of income producing properties in Abuja

The revised National Housing and Urban Development Policy states that:

"Social Housing is the response by Government to the housing challenges of 'No and Low' income earners. Even though the production of such housing can be facilitated by market forces, government must use subsidy mechanism for its distribution. It is therefore seen to promote an equitable and benevolent society and to restore the dignity of man. By this discharge of government social responsibility to the vast majority of the population who ordinarily would not have been able to afford them. It stabilizes the society from the insecurity challenges occasioned by homelessness."

HOUSING POLICY (AND SOCIAL HOUISNG POLICY)

Housing Policy

The vision to provide Social Housing must be founded on clearly defined policies. There is no National Social Housing Policy now in place. Reference is however made to social housing provision in the Draft Revised National Housing and Urban Development Policy (2011) (yet to approved) submitted to the Hon. Minister of Lands, Housing and Urban Development. The chapter on Social Housing has the following in the said document:

"Goal: The goal of government is to ensure that this segment of the population has assess to housing."

"Objective of Social Housing

The said document states that the objective of Social Housing are to:

- (i) significantly improve the well being of the poor, the needy and other vulnerable groups in the society as women, single mothers, the elderly, widows and widowers, the physically challenged, the homeless (ii) and a critical mass of citizens who fall into this group;
- (ii) provide a sustainable way of reducing the housing deficit in the country, estimated at about 16-17 million units nationwide, as at 2011: (iv)
- (iii) provide a window of opportunity for governments at all levels to demonstrate their commitment to the provision of social housing as a social responsibility to the (v) citizenry, thereby institutionalizing an efficient, responsive and sustainable mechanism for housing delivery;
- iv) facilitate socio-economic development and unlock other complementary benefits to the economy in the realm of wealth creation, (vi)

- employment generation, stimulation of investment flows and value-addition arising from the use of alternative building materials and adoption of home-grown technologies;
- v) promote the delivery of housing with secure tenure and facilitate access to funding of social housing from a variety of sources, including social housing financiers, philanthropists and other interested parties;
- (vi) facilitate the redevelopment and upgrading of urban slums for sustainable urban renewal and regeneration;
- reduce rural-urban migration, and stem the consequential loss of precious rural assets and human capital, such as farmers and the youth, towards optimizing the contribution of the rural areas to national development;
- (viii) foster peace and stability and promote human dignity, social cohesion and environmental sustainability and
- incorporate micro-enterprises (such as agro-allied ventures) in the housing scheme with a view to generating employment opportunities and enhancing the ability of beneficiaries to repay their loans at reasonable period with less strain.

"Strategies for Social Housing Production.

For the production of "non-income and low income" housing estates within the overall concept of Social Housing, the strategies to be pursued shall include:

- (i) efficiently complete as soon as possible abandoned programmes by past Governments and its agencies that target those in the low income bracket. This will maintain Government's commitment to providing value for money for those who have deposited for those houses but have not got delivery;
- (ii) adopt and sustain the concept of total funding of site and services to facilitate the access of the Low-income group to serviced plots at reasonable cost;
- (iii) make concerted efforts to eliminate the problems associated with finance;
- (iv) encourage sufficiently long-term mortgage repayment period for the No-income and Low-income earners as well as rural housing:
- (v) promote the establishment of microenterprises in social housing schemes as in Agro-housing, with pilot schemes as means of enhancing the income and subsequent mortgage repay-ability of the No-income and Low income groups;
- vi) encourage Non-Governmental

and curiously, though ironical, even the rich, the powerful and persons of the upper society (Governors, Senators, Bishops, Legislators, Persons in the academia Permanent Secretaries and Chief Executives of national and multinationals) enjoy social housing. When this happens care is taken not to designate same as social housing. When these classes of people are housed through subsidies it is elegantly and euphemistically referred to as housing entitlement/allowance. The houses are styled lodges, executive mansions, palaces, "Government House" and guest houses. The basic principle remains the same, the occupant may not be paying any rent at all or at best pays rent much below the market rent and thus highly subsidized.

The import of what is being said here is that no stigma should be attached to social housing; that the principle of housing subsidy and reverse redistribution of income from the poor to the rich through state instrumentality; which has always been enjoyed by the rich and the important be extended to and spread among the various categories of the disadvantaged/special groups as well as the poor who are always with us. Allow the crumbs to fall from the "masters' tables" so that the poor can pick-scramble for-and pick them up. Why can't we do this?

What Social Housing is

What then is social housing? Has there been any notable example of social housing in Nigeria? Key to social housing is that someone or some organizations shall in the first instance build the house before the subsidy redistribution of income element is invoked to convert such housing into social housing. The following success story and example will succinctly assist us in understanding the true meaning of social housing. The development known as Festac Town, Lagos, which housed participants to the World Black Festival of Arts and Culture in 1977, was meant after the games to be homes to various persons both rich and poor. Various types of houses consisting of storey buildings, duplexes, terraces, bungalows, blocks of 12, 24 and 48 flats were developed in the town. The principle was that it will be a mixed development housing persons from various strata and social groups in the society. This classical monumental development had play areas, police stations, post offices; place of public religious worship, schools (elementary and secondary) tarred roads, storm water drainage and all other infrastructure (electricity, telephone service, sewage disposal facilities etc) were underground. On completion of the development of the town, it was found as a matter of fact in 1977/78 when the

houses were finally balloted for that no one (both the rich, medium and low income groups) could afford to pay/purchase the houses as were ear-marked for the particular income groups. The Federal Housing Authority was faced with an embarrassing situation in which the cost per house for the estate development was far beyond the affordability of the citizenry. What shall we do? After consultations recommendations were sent to the then Head of Federal Military Government, General Olusegun Obasanjo that the cost of land, compensation payments; land survey; infrastructure (road, water, electricity, drainage, sewage treatment plant, telephone services) etc be written off and deemed and became subsidies to the allottees of the houses. In addition to this, repayment for home ownership was to be over an amortized period of 20 years with single digit interest rate of less than 5% per annum. The approval of the Head of State meant that for all practical purposes what the purchasers paid for was the substructure and superstructure of the building only. This is a classic example of social housing that benefitted all income groups in the society who purchased houses in 1978 in Festac Town. The same principle was applied to the smaller housing estates developed in the then 12 states of Federal Republic of Nigeria. It was my greatest privileged and honour as the pioneer Managing Director/Chief Executive of the Federal Housing Authority to have pioneered and implemented this novel idea in the disposal of festac houses to the poor, medium and high income groups. The disposal was by balloting for the houses. This historic social housing programme is a contribution to the restructuring of the Nigerian society in order to address structural, economic, social and spatial dyfunctionalities and injustices as some of the ballot winner/purchasers came from Ajegunle and some of the poorest neighbourhoods thereby contributing to an economically empowered and economically integrated society living in the sustainable human settlement of Festac Town. The second achievement was that this social housing allocation improved and contributed to the overall functioning of the housing sector and in particular the mortgage sub-component thereof, especially in so far as social housing is able to contribute to widening the range of housing options available to the poor. The question is whether if the experiment of the development of Festac Town and those in the various states were replicated every five years; should we still have had the sixteen million housing deficit? With this insight now into practical realities of social housing, I think, we are surer of the concept; can clearly define and perhaps reach agreement on what we mean by social housing.

Definitions of Social Housing

(Where: S A = Strongly Agreed; A = Agreed; D = Disagree; SD = Strongly Disagree)

s/n	Factors	SD (1)	D (2)	A (3)	SA (4)	Mean Score	Ranking
1	Manipulation and difficulty in determining capitalization rate	10	13	24	39	3.07	1
2	Lack of property market evidence	15	20	23	28	2.74	3
3	Inconsistency between assumptions in valuation table and actual practice	13	17	25	31	2.86	2
4	Sale and other market transactions are still relatively very low	29	22	21	14	2.23	7
5	The rejection of market price as a measure of value	18	32	17	19	2.43	5
6	Acceptance of replacement cost as a ceiling upon value estimate	17	19	23	27	2.70	4
7	Alternative to an existing building is new one	29	24	15	18	2.26	6

Source: Field survey, 2012.

The results in Table 4 shows the reasons why Estate Surveyors and Valuers adopt the cost method of valuation for income producing properties for mortgage purpose in the study area. Manipulation and difficulty in determining capitalization rate and inconsistency between assumptions in valuation table and actual practice ranked first and second with a weighted mean score of 3.07 and 2.86 respectively. This was followed by lack of property market evidence with weighted mean score of 2.74. The result shows that the use of cost method of valuation for income producing properties for mortgage purpose is rooted in the determination of property yields. This conforms with the findings of Ogunba and Ajayi (2000) that inclination of Nigerian Valuers towards Cost method is based more on the recent disillusionment with the income capitalization method than on non-availability of market evidence.

4.5 Properties offered as security for loan.

Table 5 shows the types of properties that are offered as security for loan to banks by property owners.

Type of Property	Number of Respondents	Percentage
Commercial	44	51.16
Industrial	11	12.79
Residential	31	36.05
Others	00.00	00.00
Total	86	100

Source: Field Survey, 2012.

Majority of the properties put forward as security for bank loan in the study area are commercial properties (51.16%) and residential (36.05%) as shown in Table 5. This type of properties are income generating and are usually valued using the investment and comparative method (Wyatt, 2007). Unfortunately, the properties are valued using the cost method which negates the theoretical principles that the method is ordinary ideal for specialised properties such as police station, duck yard etc.

4.6. Performance of cost method of valuation in valuing income producing properties for bank loan.

The information used in this section was obtain from the commercial banks. Only valuation reports on income generating properties used for mortgage submitted by the Estate Surveyors and Valuers was used for this analysis and the result of the analysis is detailed in Tables 6, 7, 8 and 9.

Table 6: Loan Advanced based on value got on valuation and Prices of Collaterals sold on Foreclosure using Cost Method

Method of Valuation	Property	Amount on Valuation (N)	Amount of Loan Advanced by banks (N)	Sales Price on Foreclosure (N)
Cost	A B C D E F G H I	61000000 47500000 39000000 61200000 32000000 60000000 77000000 39500000 42000000	38000000 30000000 25000000 40000000 20000000 38000000 50000000 25000000 28000000	5800000 4780000* 25650000 55000000 26000000 60500000* 68750000 42800000* 38500000

Source: Field Survey, 2012.

Table 6 shows that properties valued using the cost method when foreclosed are sold for a price higher than the amount of loan secured from the bank and therefore provided adequate cover for the loan advanced. However, except for properties B, F and H, the prices realised on the collaterals when sold on foreclosure were far below the value estimate submitted in the valuation report. Landed property is considered a good hedge against inflation as such its price should have appreciated overtime. Although the estimate produced using the Cost Method of valuation serves as a measure for bank loan, it does not represent actual market situations being that the prices which passed on the properties at the time of foreclosure were substantially below

the valuation estimates on the properties. This result stem from the fact that the Estate Surveyors and Valuers lack sufficient capability to perform credible valuation due to their usage of wrong method in valuing income producing properties such as residential and commercial properties (Idowu et al, 2012). A valuation which matches a market price is an anomaly and one expects valuation figure to be in range; a wide range as shown above is a gross misrepresentation of actual market activities and is definitely unhealthy for the profession. Hence, the need therefore to examine further the investment method used to assess some income producing properties.

Table 7: Loan Advanced based on value got on valuation and Prices of Collaterals sold on Foreclosure using the Investment Method

Method of Valuation	Property	Amount on Valuation (N)	Amount of Loan Advanced by banks (N)	Sales Price on Foreclosure (N)
Investment	J K L M N	46200000 66800000 75900000 50600000 72000000 67000000	30000000 44000000 50000000 32000000 45000000 42000000	47000000 68000000 77000000 52000000 73000000 68000000

Source: Field Survey, 2012.

those living in the mangrove swamps of the Niger Delta and others in degraded environment (e.g. erosion prone areas).

People who have been homeless, who sleep in public places such as packs and under bridges or rough sleepers.

Homeless households (those who have lost their houses to disasters or demolition as well as forced eviction) and refugees.

Ex-offenders (convicts) or those at the risk of offending.

People with physical or sensory disability. People with learning difficulties.

People at risk of domestic violence.

Travelers

Fishing, hunting and migatory households. have access to dwelling housing at affordable or no cost. These classes of people cannot afford economic rent but all the same they must be housed; because more than a social and moral contract subsist as between them and their government as well as the public. Recognition must be given to the social purpose of housing or a social obligation or justification for the state to ensure the provision of, and equitable access to housing.

How then can they be housed?

It is the seeking of satisfactory answers and solutions to the housing of these persons, that the concept of Social Housing rooted in the following has evolved and been developed:

in the duty of care and founded on the Christian principle of concern and care for others and the ethics of being our neighbours keepers (the good Samaritan) enshrined in the commandment to love our neighbours as ourselves. In this concept, housing is treated as a commodity not to be purchased or rented purely on the basis of economic capacity.

in the concept of redistribution of wealth in society. "The concept is that, part of the taxes paid and other contributions made by the rich and those that are financially well off, should be redistributed to the poor in society by way of social welfare provisions, such as social housing, welfare benefit payments, free healthcare, etc. This reasoning is that, by redistributing wealth, there will be greater social cohesion in society, as there will be less envy, less jealousy and less crime. Also that it is nice to see (that) your fellow human being has a shelter and a means of sustaining himself and his family. The importance of redistribution of wealth in society cannot be overemphasized. Let us consider the social

welfare methods from Nigeria and Sweden. The Sweden model, like other developed countries is that part of the income deducted from the well-to-do is redistributed to the poor, so that they also can have shelter and livelihood. As a consequence of this, there is expected to be less envy and jealousy, and less crime in society. The Nigerian model on the other hand is that, the rich pay close to nothing, and the poor are provided with no help at all. The result of this is that the rich do not feel secure and cannot have proper sleep, as they feel the poor are after them. The reality is that there is a price for the rich to pay, in either of the models that a country decides to adopt. The question is, which model do you prefer? (Affordable Housing Strategy for Nigeria: *Professor Prince Efere: 2011).

If nothing is done in Nigeria, the **ROBINHOOD MODEL** is an option.

SOCIAL HOUSING

What Social Housing is NOT

There is need to be sure of the concept and clearly define what we mean by social housing so that we do not discuss at cross purposes. Social housing is NOT exactly same as low cost housing or housing for the low income group even though low cost houses can be allocated for social housing purposes.

Social housing is <u>NOT</u> housing made seemingly affordable through rent control, Laws, regulations and other ante housing development measures. Social housing is <u>NOT</u> the same as affordable housing because economic affordability is not an ingredient of social housing. Social housing is as a general principle <u>NOT</u> provided for ownership although there are exceptions to this rule.

Social housing is <u>NOT</u> exactly the same as cooperative housing even though social housing can be incorporated into co-operative housing. Social housing rents, if any payable are <u>NOT</u> determined by market forces like the private rental sector in which tenancies are offered according to the free choice of the landlord or existing household. Social housing is allocated on the basis of need. Social housing is <u>NOT</u> meant for only the poor, the needy etc as social housing can be enjoyed by all segment of the society. As per the definition contained in

item 12 of the Appendix 3 to this paper (i.e. that social housing is housing provided at little or no rent or rent below market level to all cadre of society even as a result of status or office holding) therefore

A "No Housing" Situation

From the above tables, the status of standard housing variables type of housing, number of sleeping rooms, floor finish, wall finish, water supply, toilet facilities, cooking fuel, lighting fuel, waste disposal, access to telephone and access to television is substandard and poor. What this means is that in these states under consideration we are yet to make substantial efforts to housing our citizenry as the various past interventions had not made the required impact on housing delivery. There exists a **NO HOUSING** situation for the masses in all the six states concerned.

It is important to remember that the standard of housing of a people in any country is an index of its wealth and a measure of its standard of civilization. Our position relative to the developed and emerging countries need not be stated to be clearly understood.

Success Story of Shelter Origin and MTN

It is not often realized that success can be achieved by seemingly small grants (not even loans on soft terms) from corporate bodies and wealthy individuals. A small but remarkable success was achieved in 2010 when with a meager grant of =N=117,000,000 (One hundred and seventeen million Naira only) some one hundred housing units with infrastructures at the outshirt of Karu (Near Abuja) were developed. This project involved active collaboration between SHELTER ORIGIN (formerly Habitat for Humanity) Karu Local Government and MTN Foundation and the beneficiaries, who contributed their sweat equity as well as cash. The estate is now fully occupied and blossoms under the management of the residents. This success story in best practice deserves to be up-scaled into state and national programme towards the eradication of poverty and its problems. jobs creation and more importantly in the solving of the problem of homelessness (social and low income) in the Braced States and in the country. Replication of the Shelter Origin/MTN example either as a Public-Private-Partnership (PPP) or as a Public-Public Partnership (Pb Pb P) would be a giant stride in the restoration of confidence of the people in the commitment of Government to achieving the national goal of providing housing for

Access to Land Finance

Access to Land and finance for housing for the poor (social Housing) has been problematic. Considering that the poverty figure for Nigeria is 54%, this translates to about 86.40 million Nigerians that may be having extreme difficulties in accessing land and finance for housing. The Shelter Origin

and MTN illustration if taken as a model would reduce the difficulties in access to land and finance.

HOUSING AND SOCIAL HOUSING : DEFINITIONS.

Housing

The two methods piecemeal and mass for the supply of the houses are factors in

the definition of housing. The revised draft national Housing Policy 2011 defines housing:

"as the process of providing safe, comfortable, attractive, functional, affordable and identifiable shelter in a proper setting within a neighbourhood, supported by continuous maintenance of the built environment for the daily living activities of individuals/families within the community while reflecting their socio-economic and cultural aspirations and preferences. In addition, housing including the sustainability attributes of energy efficiency, resources conservation for improved quality of life"

This definition is more applicable and acceptable to piecemeal housing. National housing problems cannot be solved through piecemeal housing. However, this definition recognizes individual effort, and therefore, piecemeal development remains valid as long as individuals continue to build their own houses. Nations that have attempted to seriously solve their housing problems have not relied completely on piecemeal production but rather have adopted the principle of MASS HOUSING. This is defined as:

"the process of simultaneous production (building) to target prices of large number of decent, safe, sanitary and affordable residential buildings with secured tenure; on a continuous and permanent basis with adequate physical infrastructure, amenities and social services in a planned, healthy and livable environment to meet the basic and special needs of the population and reflecting their socio-economic cultural aspirations and preferences."

Evolution of the concept of Social Housing : Duty of Government to House all

As already stated, Government has a duty and it is obligatory on it to ensure the means of housing all segments of the society, the rich, the middle as well as the low income groups. This means that the less privileged and the vulnerable of the society: -

The disadvantaged in any form, students, widows, the elders and aged, the mentally and physically challenged including the wandering psychotics who need confinement and rehabilitation.

Indigenes of the Niger Delta especially

Table 7 shows that the prices of collateral securities sold on foreclosure were above the valuation figures estimated at the time of loan negotiation. The sale prices realized indicated appreciation in the property values. Increase in the property value means more cover for the amount of loan secured. Besides providing adequate cover for the amount of loan advanced, investment method of valuations were good proxies for prices realized on foreclosure and fairly represented what the investors and the

market paid as shown in the Table. This is in line with the assertion of Ajayi (2010) that the purpose of income producing property valuation is to duplicate the behaviour of an average investor and as such appropriate method should be used. Investment method of valuation is considered most appropriate in the valuation of income producing properties. Where an appropriate method is employed in valuation assignment, the estimated value will tend to be more reliable.

Table 8: Paired Samples t test statistics for valuation estimates on collateral properties

			Pair						
					Interv	onfidence al of the erence			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	Т	Df	Sig. (2-tailed)
Pair 1	Estimated value of cost method assessed property - Sales price of cost method assessed properties on foreclosure		5.09412	1.69804	.10653	7.93791	2.369	8	.045
Pair2	Estimated value of investment method assessed property - Sales price of investment method assessed properties on foreclosure		.20412	.08333	-1.29755	86912	-13.000	5	.000

Source: Field Survey, 2012

Table 9: Independent Sample t test for the valuation estimates on collateral properties

- 14515 51 11145	Table 3. Independent dample t test for the valuation estimates on conateral properties									
		Leve Test Equal Varia	for ity of		t-test for Equality of Means					
									Interva	nfidence al of the rence
		F	Sig.	t	Df	Sig. (2- tailed)	Mean Diff.	Std. Error Diff.	Lower	Upper
Price of Property when sold on foreclosure	Equal variances assumed	.454	.512	2.329	13	.037	17.16667	7.37068	1.24329	33.09005
	Equal variances not assumed			2.447	12.477	.030	17.16667	7.01513	1.94662	32.38671

Source: Field survey, 2012

Table 9 shows the independent sample t-test on prices realised on Cost and investment methods assessed properties when sold on foreclosure. The procedure tests whether the mean sales price of properties using the Cost Method is greater than the mean sales price of properties using the investment method when such properties are sold on foreclosure. Levene's test in the table above, tests the hypothesis that the variances in the two groups are equal; if Levene's test is significant at p = 0.05 then the variances are significantly different, if however, Levene's test is non - significant (i.e. p > 0.05) then the difference between the variances is zero and the variances must be roughly equal. For these data, the Levene's test is non - significant (because p = 0.512 > 0.05) so the test statistics is that of equal variances assumed. Therefore the t statistic is 2.329 with degree of freedom of 13. The two-tailed value of p is 0.037, which is less than 0.05. The data therefore shows that there is a statistically significant difference between the mean sale price of investment and Cost Method assessed properties, t(14) = 2.329, p = .037 < .05).

One-tailed probability is 0.0185 (0.037/2) and is also less than 0.05. This implies that investment assessed properties used as securities for loan have a statistically significantly higher mean sale price on foreclosure than Cost Method assessed properties. In other words, the mean sale price of investment method-assessed properties used as securities for loan when sold on foreclosure is greater than the Cost Method assessed properties. The investment method of valuation is therefore more appropriate than Cost Method for income producing properties used for securing bank loan. The use of Cost Method for income producing properties used for securing bank loan produces lower prices on foreclosure. This suggests that the use of Cost Method of valuation for income producing properties is inappropriate. Values estimated by this method may mislead the banks and consequently result in banks not being able to recover loans advanced on such security properties. This has the tendency of eroding the confidence imposed on the valuers.

5.0. SUMMARY OF FINDINGS RECOMMENDATION AND CONCLUSION.

It was revealed in the study that properties assessed using the investment method have their confidence intervals below 0.00 (valuation figures are below the sales prices on foreclosure) suggesting that property values appreciated overtime. For the properties valued using the Cost Method, the confidence intervals are above 0.00, which implies that although, the price of the property at foreclosure provided adequate cover for the loan, the valuation figures were higher than the sales price at foreclosure.

It is therefore, recommended that the cost method of valuation should not be used for income producing properties especially for bank loan as the value realised at foreclosure will not actually represent the market value of the property. However, the comparative method should be embraced fully by valuers since the approach gives a clue on realizable market price. This can be achieved if the Nigerian Institution of Estate Surveyors and Valuers can establish a data bank where information on property transactions carried out by Estate Surveyors and Valuers can be kept for future reference. This gesture will forestall the idea of not divulging information among valuers.

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TABLE HC2: DISTRIBUTION OF HOUSEHOLDS BY TYPE OF HOUSING UNIT

STATE	Total	House on a Separate Stand or yard	Traditional/ Hut Structure made of traditional material	Flat in block of flats	Semi- detached house	Rooms/ Let in House	Information/ Improvised dwelling	Other
Akwa Ibom	857,436	513,505	76,303	135,637	60,672	58,184	2,948	10,187
Bayelsa	352,025	192,955	51,846	42,431	19,302	38,717	2,129	4,645
Cross River	645,251	368,875	61,146	67,193	46,801	94,393	2,844	3,999
Delta	890,312	311,924	45,765	141,222	77,824	239,076	9,623	64,878
Edo	701,073	352,978	16,646	102,775	36,082	165,209	3,384	23,999
Rivers	1,123,998	654,113	63,796	198,513	58,114	132,714	6,408	10,340
Total Braced								
States	4,570,095	2,394,350	315,502	687,771	298,795	728,293	27,336	118,048
As % of	16	17	8	25	11	19	17	21
Nigeria	28,197,085	14,274,444	3,944,091	2,762,955	2,638,932	3,861,592	158,022	557,049

TABLE HC3: DISTRIBUTION OF REGULAR HOUSEHOLDS BY NUMBER OF EXCLUSIVE SLEEPING ROOMS

STATE	Regular	No	One	Two	Three	Four	Five	Six	Seven	Eight &
	Household	Sleeping	Room	Rooms	Rooms	Rooms	Rooms	Rooms	Rooms	Above
		Room								Rooms
Akwa Ibom	857,436	95,753	62,125	119,003	158,321	144,216	94,146	77,142	41,372	65,358
Bayelsa	352,025	30,015	57,860	77,872	72,704	48,032	25,066	17,682	9,296	13,498
Cross River	645,251	80,964	150,778	128,824	98,421	75,177	39,738	32,883	15,557	22,909
Delta	890,312	230,091	187,174	199,795	139,548	71,403	27,338	17,326	7,200	10,437
Edo	701,073	116,378	139,874	114,258	102,033	72,706	38,635	45,426	7,562	12,506
Rivers	1,123,998	117,319	193,899	215,203	220,559	154,535	88,502	58,888	32,486	42,607
Total Braced										
States	4,570,095	640,535	791,710	854,955	791,586	566,069	313,425	249,347	23,363	209,120
As % of	16	14	4	17	17	15	17	18	17	14
Nig eri a	28,197,085	4,708,651	4,493,927	4,896,474	4,701,811	3,658,840	1,880,026	1,598,732	724,142	1,534,482

TABLE HC5: DISTRIBUTION OF REGULAR HOUSEHOLDS BY TYPE OF MAIN MATERIAL USED FOR WALL OF DWELLING UNIT

STATE	Total	Mud/	Wood/	Stone	Cement/	Metal/Zinc	Other
		Reed	Bamboo		Blocks/	Sheet	
					Bricks		
Akwa Ibom	857,436	240,794	44,796	16,738	516,744	33,891	4,473
Bayelsa	352,025	105,099	49,423	1,956	164,742	26,456	4,349
Cross River	645,251	247,458	38,185	5,304	319,334	29,145	5,825
Delta	890,312	264,466	50,672	8,030	526,871	32,676	7,597
Edo	701,073	173,841	13,574	4,047	481,444	24,667	3,500
Rivers	1,123,998	178,389	69,802	14,746	775,091	71,882	14,088
Total Braced							
States	,570,095	1,210,047	66,452	50,821	2,784,226	218,717	39,832
As % of	16	11	14	11	20	21	15
Nigeria	28,197,085	10,844,894	1,909,538	478,761	13,627,530	1,064,613	271,749

Transformation Agenda 2011-2015 informs us that:

"For the housing sector, the Federal Ministry of Housing will provide site and services in all parts of the Country in collaboration with states and local governments. On their part, states and local governments will provide low cost housing within the range of 100,000 to 200,000 units annually in major cities across the Country."

CURRENTS STATUS OF HOUSING Housing Policy

There is need to point out that the 1991 Housing Policy is the extant National Housing Policy. All efforts to approve a draft National Housing and Urban Development Policy since 2003 and immediately after the issuance of the White Paper on the Presidential Technical Committee on Urban Development on housing eluded all. Only on the 10th of October, 2011, (i.e. 20 years after the first National Housing Policy) was a revised draft National Housing and Urban Development Policy submitted to the Hon. Minister of Lands, Housing and Urban Development. This revised policy has received the endorsement of stakeholders as well as the approvals of the National Council of Lands. Housing and Urban Development, and the National Economic Team. It is awaiting presentation to the National Council of States and finally the approval of

the Federal Executive Council. Even though this Revised Policy is yet to be approved at the highest level of Government, there seems to be light at the end of the tunnel and reasonable hope that Nigerians will be housed as the revised National Housing Policy (yet to be approved) states that the purpose of the policy is:

"to ensure that all Nigerian own or have access to decent, safe, and sanitary housing in healthy environment with infrastructural services at affordable cost, with secure tenure..."

This positions the housing sector as one of the prime drivers of socio-economic development, including job creation and employment as well as accelerated national transformation."

Housing Availability and Deficiency : Current Status

Nigeria with an estimated population of 160 million people and with 50% urbanization rate is among the highest rapidly urbanizing countries in Africa. Despite various stated agenda blueprints, catalogue of rights, conventions, covenants, policies, strategies and visions, housing shortage in Nigeria is currently estimated at 16 million while 70% of the urban population (56 million people) lives in slums. The South-South States have a housing deficiency of 2,401,614 representing 15.01% of the national deficiency.

ESTIMATED HOUSING DEFICIT

<u>States</u>	Population (2006)	<u>Households</u>	<u>Deficiency</u>
Akwa Ibom	3,920,208	857,436	448,012
Bayelsa	1,703,358	352,025	194,665
Cross River	2,888,966	645,251	330,159
Delta	4,098,391	890,312	468,376
Edo	3,218,332	701,073	367,800
Rivers	<u>5,185,400</u>	<u>1,123,998</u>	<u>592,602</u>
Total	21,014,655	4,570,095	2,401,614
As % of	15.01	16.21	15.01
Nigeria	140,003,542	<u>28,197,085</u>	<u>16,000,000</u>

Standard Housing Variables

The 2006 POPULATION AND HOUSING CENSUS OF THE FEDERAL REPUBLIC OF NIGERIA BY THE NATIONAL POPULATION CENSUS [NATIONAL AND STATE POPULATION AND HOUSING TABLES: VOLUME 1] has the following which showed the status of housing in the South-South states.

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FACTORS AFFECTING THE RELIABILITY OF REAL ESTATE INVESTMENT APPRAISAL METHODS IN IKEJA, LAGOS, NIGERIA.

By

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ABSTRACT

Appraisal methods need to be reliable, as the decision taken affects the future of the capital committed. Thus, this paper identifies the factors affecting the reliability of real estate investment appraisal methods in the Nigerian investment environment. Questionnaires were administered on estate firms and data analyzed using the percentile. The methods used include: Net Present Value, Internal Rate of Return, Payback, Residual, Return on Capital Employed, Discounted Payback and Developers' Profit. The factors affecting the reliability of these appraisal methods include: unstable and volatile economy, unfavourable socio-political climate, inadequate market survey, inconsistent government policies and poor prediction of development variables. The paper recommends that appraisers should adopt the modern appraisal techniques and multi-criteria analysis, treating all criteria on the same basis without selecting a single criterion as benchmark. While the government and other stake-holders in the economy should ensure stability of the economic and political climate to make projections reliable.

Keywords: Real Estate Investment, Appraisal Techniques, Reliability.

1.0 INTRODUCTION

In real property investment, decision once taken may be irreversible or at least costly to amend. Therefore, it is important for investment decisions to be appraised, and the need for a reliable technique for appraising real estate investment cannot be overemphasized.

An appraisal of real estate is an opinion, or estimate of value of a property, made by gathering and analyzing the essential data as at a specific date. It is based upon the 'highest and best use' of the property; that is, use which will produce the greatest net return. Such an estimate will take into consideration zoning law, government regulation and the demand for that type of property in that area (McLean, 1979). It is an opinion expressed by an expert on a project, development or on a contemplated proposal, to assess whether capital expended will be beneficial for the entity or not (Ansar, 2009). It is an evaluation of the attractiveness of an investment proposal using various methods (Businessdictionary.com, 2012), it is a technique for determining whether an investment is likely to be profitable (Investorswords.com, 2012). To Okoh (2008), real estate investment appraisal is the careful estimation of all factors which go to make value. Therefore, a project is viable or profitable if the value (benefit) in

relation to the cost is positive.

Appraisal of property investment is done by various methods or techniques and the final opinion on the cost and benefit is given by weighing the values from each methods used. However the reliability of some of these methods has been called to question. According to Adi (1983), the improper use of real estate appraisal methods by estate surveyors and valuers called for concern. Of concern also is the traditional approach to investment appraisal, as it does not take cognizance of the explicit treatment of risk and usually concentrate on few assumptions and intuition (Ajayi, 1998). In the Nigerian property investment market, many factors affect the reliability of the various methods of appraising real property investment. To Bello (2001), the role of market survey is to provide all the data necessary to allow the appraiser make an informed decision. Unfortunately, Nigerian real estate analysts rarely carry out detailed market study, which in turn affects the analysis'.

According to Suchman (1967), the reliability of a measure refers to the degree to which the measure could be depended upon to secure consistent result upon repeated application. The various factors affecting the reliability of these methods have been responsible for much of the inefficiency and

African Charter on Human and People's Rights (ACHPR)

Although this Charter does not expressly recognize the right to housing the commission has interpreted the Charter as recognizing housing right in SERAC V. Nigeria.

International Human Rights Law

Everyone has a right to housing. International human rights law affirms the right of vulnerable groups, including woman, children, the aged, internally displaced persons, refugees and the poor to housing. Specifically prohibited is discrimination to access to housing against vulnerable groups.

United Nations Commission on Human Rights

On 10th March, 1993, this Commission unanimously adopted resolution 1993/77 which labels forced evictions, wherever they occur, as a "gross violation of human rights, in particular the rights to adequate housing." Forced eviction is defined as the:

"permanent or temporary removal against their will of individuals, families and/or communities from their homes and/or land which they occupy without the provision of, and access to, proper forms of legal or other protection"

Express Guarantees and Right to Housing

The right to adequate housing may be implied from express guarantees of other rights (e.g. the right to life, privacy of the home, right to family life) which are recognized as basic civil and political in most constitutions. These arguments are based on the premise that the full realization of these stated rights is impossible without also realizing the right to housing.

HOUSING RIGHTS OF NIGERIANS

The right of all Nigerians to be adequately housed is further strengthened by the following: -

the declaration on 8th May, 1985, by the Hon. Minister of Works and Housing at the inauguration of the committee charged with the responsibility of drawing up a National Housing Policy and that:

Government plans to take positive steps to ensure that the less privileged members of the society, including the wandering psychotics who require confinement and rehabilitation, have access to dwelling houses.

the fact that the national housing policy

produced by the 1985 committee and launched in February, 1991 stated that the ultimate goal was:

"to ensure that all Nigerians own or have access to decent, safe and sanitary housing accommodation at affordable cost by 2000."

the Housing Sector Vision of NEEDS 2 (Draft) states:

"contribute to poverty reduction, employment, wealth creation and environmental sustainability by providing adequate affordable and secure housing..... reduce population of slum dwellers by 50% by 2011....."

the Nigeria Vision 20:2020 which is the Federal Government Economic Transformation Blueprint considered shelter as "one of the most basic human needs" and saw non-affordability as the real barrier to satisfying this basic need. Among the strategic initiatives suggested by the blueprint, the following are paramount: -

- (a) An effective and administration system to make land ownership more available, accessible and easily transferable at affordable rate.
- (b) Efficient and transparent land title transfer system.
- (c) An effective legal and regulatory framework to enforce the control and monitoring of housing delivery.
- (d) Commercialization and recapitalization of mortgage and the capital markets.
- (e) Incentives to attract Public Private
 Partnership (PPP) in mass housing
 development.

the implementation plan of the National Vision states that: -

"10 million new houses to the national housing stock should be added by building an average of one million new houses every year; and ensure that at least 50% of them are in the rural area; and provide incentives to encourage Public Private Partnership (PPP) in mass housing development."

FSS 2020 : Mortgage Sector Mission statement is :

"to use the mortgage market as a major agent of positive social and economic change by making mortgage finance available to all classes of Nigerians."

THE IMPERATIVE OF SOCIAL HOUSING IN THE SOUTH SOUTH REGION OF NIGERIA

By S. P. O. Fortune Ebie

SHELTER (HOUSING VERSUS FOOD AND CLOTHING ETC)

In contrast to the generally shared often stated position that housing (shelter) is an important need next to food, my position is that housing is second to none. I take this unusual position because even in death you need a shelter (a house) i.e. your grave. Whether alive or dead shelter is a basic need of man. Through the provision of water, electricity, security, recreational facilities; even in the cemetery, the shelter (grave) transforms into a house. As housing for the living creates job opportunities; through the planning of cemeteries and all activities of the professions in the built environment and the activities of undertakers. digging and preparation of graves, casket making, the construction of immemorian and the general maintenance (facility management) of the cemeteries, (e.g. Alington cemetery U.S.A.) so housing the dead also creates job opportunities. Has the time not arrived for us to carefully reexamine and probably dispute Abraham Maslow's concept that "Housing was next in the hierarchy of human needs after food"?

HOUSING: A CORE HUMAN RIGHT

Declaration states:

That this is the case is seen in the following:

Universal Development of Human Rights
The right to adequate housing is considered a core human right. Housing rights were first universally codified in the Universal Declaration of Human Rights adopted and proclaimed by the United Nations General Assembly in 1948. Article 25 of the

Everyone has the right to a standard of living adequate for health and well being for himself and for his family, including food, clothing, housing; medical care and necessary social services and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

The International Covenant

The 1976 International Covenant on Economic, Social and Cultural Rights, in its Article II (1) which states as follows has the most significant universal

codification of the right to adequate housing:

The state parties to the present covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The state parties will take appropriate step to ensure the realization of this right, recognizing to this effect, the essential importance of international co-operation based on free consent.

This codification is now binding on more than 149 countries, including Nigeria

General Comment of the Covenant and the Constitution of Nigeria

The General Comment No. 4 Article II (1) of the International Covenant of Economic, Social Cultural Rights states that the minimum requirement of adequate housing is:

"Tenure, security, affordability, adequacy, accessibility, proximity to service, availability of infrastructure and cultural adequacy."

Many countries have incorporated the provisions of the General Comment No. 4 into their national constitutions and written laws. In Nigeria, and as per section 16 (1) (d) of the 1999 constitution, under the Chapter on Fundamental Objectives and Directive Principles of State Policy, the Nigerian state is enjoined:

"to provide suitable and adequate shelter for all citizens."

Regrettable, this objective of state policy is not enforceable in law as no citizen can insist on it and enforce same as a right. Since housing is a right, it should be a provision in the Nigeria Constitution so that it can be enforced by law. It should, therefore, not be under the section on the Fundamental Objectives and Directive Principles of State Policy. The Constitutional provision should be such that all strata of our society can enforce their rights to being housed. Once this is done, arguments doubt justiciability and claimability would be rested. Persons affected can challenge infringements of their rights to housing.

inconsistency in the appraisal of real property investment in the past. This often lead to investors investing at loss, in the form of low return on investment, abandoned construction work, loss of collateral, problem of bad location etc. Hence, this paper highlights the various methods of real estate investment appraisal, with a view to identifying the factors affecting the reliability of these methods in the Nigerian real property investment environment.

2.0 METHODS OF INVESTMENT APPRAISAL

In order to achieve the investment objectives, the available resources must be utilized efficiently, and this can be achieved only if at the project conception, optimal investment decisions are taken on rational and logical basis. In order to assist the investment decision maker to choose between alternative competing projects and realizing the worthwhileness of a proposed project, it is necessary to adopt the suitable technique. The methods available for investment appraisal can be classified into two groups, namely:

Traditional methods and Modern methods.

2.1 Traditional Methods of Appraisal

The traditional methods mostly applied in investment appraisal include:

Accounting Rate of Return Payback Period Breakeven Appraisal

2.1.1 Accounting Rate of Return

Accounting Rate of Return is employed to measure the rate at which profit is expected to be made from an investment. It is the profit generated from an investment expressed as a percentage of the capital outlay (Bello, 2001).

The computation involved in this method can be carried out in three ways using:

Optimum Criteria (Peak Period), First Year Return and Average Profit Method

The disadvantages of this method according to Dixon (1988) include:

There is no authoritative method of calculating capital employed or defining profit

It does not differentiate between large and small investment decision, the flow of profit or the length of the investment.

The results are subject to misinterpretation. It does not recognize time value of money (Okoh, 2008).

2.1.2 Payback Period

Payback period simply measures the number of years the original cost of investment is expected to be recovered. According to Aniagolu (1987), it refers to how quickly the incremental benefit accrued to a company from an investment 'payback' the initial capital invested in terms of after tax flows. The payback method can be used for investment decision-making in three ways. When faced with a straight accept or reject decisions. It can provide a rule where project are only acceptable if they pay the initial outlay within a certain predetermined time. The method is applied when a potential property investor wants to know the number of years it would take him to recoup his initial outlay including the interest on loan and opportunity. Mutually exclusive projects are ranked in terms of speed of pavback. with the fastest paying back project being the most favoured.

Payback period have been criticized for its disadvantages arising from its ordinary application outside the cash flow concept. Some of the disadvantages include:

The method does not take into account the income from investment after payback date. It is not a good measure for providing guide on optimum investment decision, as the fastest paying back investment may not bring the highest return.

It disregards the effect of time on the money earned at different period.

It fails to answer the question on when the rate of interest on capital outlay is repaid.

It does not make allowance for taxation and capital allowance which are usually different for various project (Adi, 1983).

Another problem of payback period is what is meant by initial investment outlay and how the start of payback period is defined. Whether at the end of the last capital outlay (year1) or from the starting of the initial outlay (year 0) (Aniagolu, 1987).

Marrett and Sykes (1971) criticizing the method have this to say 'no method which so over simplifies the complexities of investment decision can hope to answer useful questions of this sort and yet answer to such questions are commonly required'.

2.1.3 Break-Even Appraisal

Break-even Appraisal derives its concept from the economic notion of break-even point which tests for the break-even point and how long it takes to get there (Umeh, 1977). In its simplest form, it involves the determination of the sale level at which an investment neither makes a profit nor incurs a loss (Ogbuefi, 2002). It gives an idea of the benefit

-(56)

magnitude (as a trend) after a break-even point. It is a forward looking technique with retrospective flexibility. It provides performance indicators for judging the viability of a project. Furthermore, it provides relevant information for advice on marketing policy of the product and can be used to advantage in advising public authorities providing housing on the amount and component of subsidies to ask for. Umeh (1977) opined that the first test in viability appraisal should have been Break-even Appraisal. However, Break-even Appraisal technique is more appropriately applied to manufacturing or sales investment analysis than real estate appraisal (Ogbuefi, 2002), also it will be incorrect to argue that a project is more viable than another merely because it breaks even at an earlier period (Umeh, 1977).

2.1.4 Return on Capital Employed (Developers' Profit)

This is variously referred to as yield, annual return on total investment and return on borrowed and equity capital (Adi, 1983). In its basic form, Return on Capital Employed is calculated as the ratio of the accounting profit generated by an investment project to the required capital outlay expressed as a percentage.

 $(i/(y) \times 100)\%$eqn 1

i = net annual income on investment (rent), y = total cost of investment

The normal practice in investment appraisal is to calculate profit after depreciation but before allowing for taxation and to include in capital employed and increase in working capital that would be required if the project were accepted. Unlike the payback approach, this method provides a rule to reject projects that have lower return, and has an advantage over the payback period by considering the profit flow over the whole life of a project. Adi (1983) opined that this advantage is not very helpful in property investment because real estate has a long life span and the profit flow may not be easily ascertained over a long time. Also the method ignores the possibility of differing lengths of lives, as difference in length of life may be of crucial importance when comparing alternatives, because of uncertainty, liquidity or technological change. Furthermore, this method of investment appraisal ignores the time value of money and concentrates on a project accounting, defined in financial term rather than cash flows.

2.1.5 Residual Technique

The residual appraisal technique is often referred to as development appraisal technique and it is used to ascertain the value of unknown such as any selected development project or an under-utilised piece of development or even vacant land with latent value. Where the value of other factors of production viz labour, capital and management are known, the value of the remaining factor (land) can be ascertained quantitatively (Ogbuefi, 2002).On the whole, the following key factors have to be considered in residual appraisal: rent, yield, cost of construction, development finance, period of development, return for profit and risk and contingencies. Ogbuefi (2002) cautioned that any mistake in the application of the technique in the form of under-estimation or over-estimation of value or cost of development would affect the residual value arrived at. Umeh (1977) observed that the residual technique can be expressed in a simple mathematical equation.

CV = GDV - (CD +PA).....eqn 2

Where CV= capital value of land, GDV = gross development value, CD = cost of development and PA= profit allowance.

There may be considerable difficulty in accurately estimating the components of the equation. Also with so many variables in the equation, slight changes in a few of them will almost result in a wide range of answer or outcome. Development often takes longer period than expected, so figure forecast for original period may be subjected to change. Position regarding expenditure at a particular stage may be difficult to determine and it is cumbersome (Umeh, 1977). Ogbuefi (2002) pointed out that some of its deficiencies include: arbitrary nature of the technique because of the subjective professional judgment built into it. The technique is crude because the various constituents of the cost may be influenced by various factors over a period of time.

2.2 Modern Methods of Appraisal

The modern methods include: the discounted and the compounded cash flow methods. The two discounted cash flow (DCF) methods widely used in practice are the Net Present Value (NPV) and the Internal Rate of Return (IRR). Other methods are the Discounted Profitability Index, the Discounted Payback method and the Net Terminal Value (a compounded method).

2.2.1 Net Present Value (NPV)

This is a method of appraisal by which an investment is judged according to whether or not the income from it balances or outweighs the capital outlay. If it does (i.e. NPV is zero or positive) the investment is acceptable and if it does not (i.e. NPV is negative) the investment is rejected. It is worthwhile to undertake an investment if the cash

5.0 CONCLUSION AND RECOMMENDATIONS

Notwithstanding the shortcomings of the various methods of real estate investment appraisal, the major factors affecting the reliability of these methods were revealed by this study to be: 'unstable volatile economy', 'unfavourable sociopolitical climate', 'inadequate markets survey', 'inconsistent government policies' and 'poor predictions of development variables'. Thus, the factors stems from the actions of the government, economic situation and the errors on the part of the appraisers.

However, the effects of the identified factors could be reduced through the following recommendations.

Adequate market analysis and forecast of economic variables with consideration of the socio-political trends is vital to a reliable appraisal operation.

Appraisers should adopt multi-criteria analysis that treats all criteria on the same basis without selecting a single criterion as benchmark with the current price index, the prevailing rate of return, inflation, interest rate and tax incorporated in the investment analysis.

More research should be carried out on the existing techniques with a view to improving and adapting them to the peculiarities of the Nigerian economy.

Data bank, where information can easily be accessed to solve the problem of unavailability of adequate and reliable information on real estate investment, should be provided by the Nigerian Institution of Estate Surveyors And Valuers (NIESV) and the Estate Surveyors And Valuers Registration Board Of Nigeria (ESVARBON) with regular exchange of information among professionals in the built environment encouraged

The government should ensure the stability of the political climate and the economy through the stability of exchange rate, interest rate and effective check on inflation to make projections reliable.

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Table 5: Methods of Property Investment Appraisal used by the Surveyors

S/N	Method of Appraisal	Number	Percentage
1	Net Present Value	14	25.0
2	Internal Rate of Return	11	19.6
3	Payback	8	14.3
4	Residual	8	14.3
5	Developers' Profit	8	14.3
6	Discounted Payback	3	5.4
7.	Others	4	7.1
	Total	56	100

Source: Field survey, 2003.

From table 5, the Net Present Value (NPV) method is the most used method of appraisal in practice (25%), followed by the Internal Rate of Return (IRR) (19.6%), the Payback (14.5%), Residual (14.3%), Developers' Profit (14.3%), Discounted Payback (5.4%) and the combination of other methods took 4% of the frequency of the methods use by the professionals.

From the response, Residual, Developers' Profit and the Payback period methods of appraisal were the most popular traditional methods of appraisal. The Net Present Value (NPV) method and the Internal Rate of Return (IRR) were the most popular modern methods of appraising real estate investment in practice. However, the Net Present Value (NPV) method was the most used method of appraisal, followed by the Internal Rate of Return, Payback Period, Residual Method and Developers' Profit, while others are hardly used.

4.6 Factors affecting the Reliability of the Appraisal Methods

From the responses, as shown in Figure 1, the majority of the factors attributed to be affecting the reliability of methods of appraising real estate investment in Nigeria could be summarized as follows.

Unstable and volatile economy (31.5%)

Unfavorable socio-political climate (22.8%).

Inadequate market survey (17.4%).

Inconsistence government policies (15.5%).

Poor predictions of development variables (12.8%).

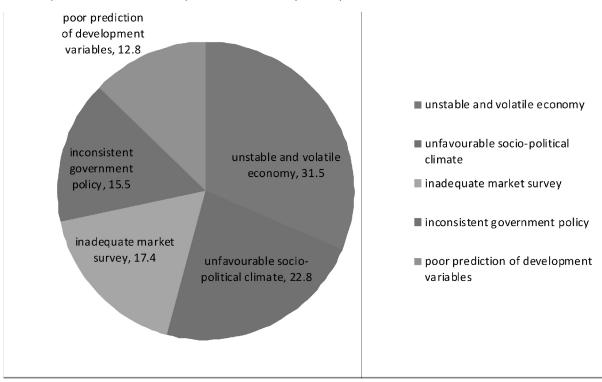


Figure 1- Bar Chart showing the factors affecting the reliability of appraisal methods.

realized is at least equal to, if not greater than the cash put into it (Ajayi, 1998). It assesses the profitability of a project on the basis of the value arrived at when the present value of all cash outflow as at the time they occur are subtracted from the present value of all cash inflows as at when they occur employing a target rate, an opportunity cost rate, which could be earned if the fund is invested in the next best alternative (Bello, 2001). By this method due consideration is given to the timing of cash flow and each considered in term of present value discounted for the necessary period of time at the rate of return required by the investor. When used to rank investment, the one with the highest NPV at the target return is preferred. According to Umeh (1977), the greatest problem of the NPV lies in the choice of appropriate rate of return applicable to a particular project. This is noticeable in the case of public investment project on what form such a rate of return takes and the problem posed by imperfection in the capital market. For private projects a suitable rate from the private sector is adopted, while in public projects, no government or public authority which is acting prudently can afford to use a discounted rate below its own borrowing rate as such an action may distort the picture of viability.

2.2.2 Internal Rate of Return (IRR)

The Internal Rate of Return sometime called investor's yield is the rate of return which when applied to the discounting of cash outflows and inflows equates their present values, thus showing a net present value of zero (Umeh, 1977). It is the actual return based on the cash flow inherent in the individual property as distinct from the external market rate of return. In a comparative analysis, a project with higher IRR would be preferred, in a situation of equal risks; an investor will select a project where the IRR would be equal to or more than the IRR of alternative investment (Ogbuefi, 2002). Ogbuefi (2002) further stated that where an investor is expecting or has a particular discount factor in mind, he may be in position to know whether the discount factor obtained from the analysis is more or less than the particular discount factor.

The IRR is often found either by iteration or linear interpolation between two rates of interest, using the formula:

$$IRR = r + \{(R - r) \times \underbrace{NPV@r}_{NPV@r + NPV@R}\}...eqn3$$

(ignoring positive or negative signs). r = lower trial rate, R = higher trial rate.

However, Okoh (2008) has developed a new method of calculating the IRR, which eliminates the trial and error method of choosing the interest rate, this is based on the annual value method of appraisal and the investment method of appraisal.

IRR has some short comings: without considering the incremental investment, IRR is unreliable in ranking projects of different scale. IRR is also unreliable in ranking projects which have different pattern of cash flows over time. It can result in multiple rate of return under condition of nonconventional cash flow. Any sub period in which negative cash flow occurs may lead the investment to have more than one IRR figures. With nonconventional cash flows, there may exist a situation where there will be no real solution to the problem and therefore no IRR (Umeh, 1977).

2.2.3 Discounted Profitability index (D.P.I)

The Discounted Profitability Index is a widely advocated method of investment appraisal but not widely used (Bello, 2001). Its other names include excess present value index, benefit-cost ratio etc. It is defined as the ratio of the present value of the project cash inflow to the present value of the project cash outflow.

If the index is less than one, this is equivalent to negative NPV and the project should be rejected, while it is accepted if the index is equal or greater than one. With mutually exclusive projects, the project with the highest discounted profitability index should be accepted (Bello, 2001).

2.2.4 Discounted payback

One of the critisms of payback method is that it takes no account of the time value of money, the discounted payback is therefore designed to overcome this critism. Discounted payback focuses on the time it requires to recoup the original cash outlay in present value cash flow terms. It is simply a version of the NPV with an artificially truncated project life. However, like the standard payback method it does not consider the cash flow after the payback period (Bello, 2001).

2.2.5 Net Terminal Value (NTV)

This is the value of the projects cash flow in terms of what it could worth at the end of the project's life. In this case all the cash outflows and inflows are compounded to ascertain their equivalent net value at the end of the investment (i.e. their net terminal value) (Bello, 2001). According to Okoh (2008), the formula for NTV. its methods and calculation are

directly similar to those of the Net Present Value (NPV), but the NPV involves discounting the cashflows while the NTV involves compounding the cashflows. Okoh (2008) gave the formula as:

Where GTV = Gross Terminal Value, CO = Initial Investment.

1.0 METHODOLOGY

A random survey was carried out to identify the 4.1

factors affecting the reliability of real property investment appraisal methods in Nigeria through the use of questionnaire. 60 questionnaires were administered to professional firms of estate surveyors and valuers in Ikeja, Lagos, Nigeria. 56 questionnaires representing 87% were retrieved and the data presented in tables and analyzed using the percentile.

4.0 RESULT AND DISCUSSION

4.1 Status of Respondents

Table 1: Status of Respondents

S/N	Status of respondent	Number	Percentage
1	Principal/managing partner	10	17.9
2	Branch manager	20	35.7
3	Estate surveyor and valuer	22	39.3
4	Others	4	7.1
	Total	56	100

Source: Field survey, 2003.

From the table 1, 17.9% of the respondents were principal/managing partners of the firms, 35.7% were branch managers, 39.3% staff estate surveyors and valuers, while 7.1% represents other designations. It could be seen that the combination of the principal/managing partners and the branch managers constituted 54% of the total respondents giving an assurance of reliable response because of their experience.

4.2 Qualification of Respondents

Table 2: Qualification of Respondents

S/N	Qualification	Number	Percentage
1	B.Sc/HND plus FNIVS	0	0
2	B.Sc/HND plus ANIVS	28	50.0
3	B.Sc	16	28.6
4	HND	12	21.4
	Total	56	100

Source: Field survey, 2003.

The response shows that, 50% of the respondents had B.Sc or HND with ANIVS, 28.6% had B.Sc only and 21.4% of the respondents had HND only. From the above, although, none of the respondents was a Fellow of the Nigerian Institution of Estate Surveyors and Valuers, but half of them are elected members of the Institution, giving an assurance that they are competent to give reliable information on the subject matter.

4.3 Years of Experience of Respondents

Table 3: Years of Experience

S/N	Years of Experience	Number	Percentage
1	1 5	22	39.3
2	6 10	18	32.2
3	11 15	6	10.7
4	10 and above	10	17.8
	Total	56	100

Source: Field survey, 2003.

From the response, 39.3% of the respondents had working experience ranging between 1 5 years, 32.2% of the respondents have been in practice for between 6 10 years, while 10.7% have been in practice for between 11 15 years and 17.8% were in practice for about 16 years and above. It shows that the majority of the respondents had the required working experience that could make the information rendered useful and reliable. Majority of the respondents understand through years of working experience the type of information sought. As 50% are associate members the Nigerian Institution of Estate Surveyors and Valuers and more than 60% have been in practice for between 6 and 16 years and having it in mind that the minimum years required for qualification as an Associate of the Institution is two years.

4.4 Frequency of undertaken Real Estate Appraisal

Table 4: Frequency of undertaken Real Estate Appraisal

S/N	Description	Number	Percentage
1	Most frequently	8	14.3
2	Frequently	12	21.4
3	Fairly frequent	22	39.3
4	Least frequent	14	25
5	Never received	0	0
	Total	56	100

Source: Field survey, 2003.

From table 4 above, 14% of the respondents carryout the appraisal of real estate investment 'most frequently', 22% undertake appraisal of real estate investment 'frequently', 39% 'fairly frequent' and 25% 'least frequent'. It is therefore noted that 75% of the respondents carryout appraisal of real estate at least 'fairly frequent' and there is none of them that has never undertaken real estate investment appraisal.

4.5 Methods of Property Investment Appraisal used by the Surveyors

The surveyors were asked to indicate the methods they use in investment appraisal and the responses are as presented in Table 5.



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- 3. A wing of 5-Bedroom Duplex with 2Bedroom flat Bq @ LEKKI PH 1: N5m p.a
- 4. 4-Bedroom spacious flat @ GBAGADA PH II: N1.3m p.a
- 5. 3-Bedroom spacious flat @ GBAGADA PH II: N1.2m p.a



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