

**ASSESSMENT OF CORPORATE PROPERTY ASSETS MANAGEMENT
IN THE NATIONAL CEREALS RESEARCH INSTITUTE NCRI
BADEGGI**

BY

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AUGUST, 2023

ABSTRACT

One major challenge confronting developing countries like Nigeria is that of inadequate provision and maintenance of corporate public assets and their worsening state is usually associated with inadequate and inefficient management culture. The aim of the study is therefore to assess how corporate property assets are managed in the Nigerian Cereals and Research Institute NCRI, Badeggi, Niger state. This was achieved by identifying the categories of assets in the organization, the condition of these assets, examining the factors influencing their present condition and the identification of the management strategy that is adopted in the management of the assets in the study area. Data was collected with the use of questionnaires, personal observation and oral interview. Based on the Snowball's non-probabilistic sampling techniques, a sample size of 24 respondents was chosen. Finding showed that, though the office complexes and staff quarters are in good condition, the state of many facilities and infrastructure in the Institute was below specification and many of them have lost their economic value. Factor considered by the respondents for the poor state of assets in the study area include lack of maintenance policy with Relative Importance Index (RII) of 0.9905, misuse of assets by the users with RII of 0.9333 and Lack of timely response to maintenance work with RII of 0.8286. The less important factors include lack of experienced and well trained building maintenance personnel, inadequate provision of fund for maintenance and corruption with RII values of 0.7809, 0.7905 and 0.7619 respectively. It can be concluded that the absence of efficient culture of maintenance and attitude towards corporate assets is partly responsible for the poor state of public assets in the study area. By implication, in the absence of effective monitoring and evaluation scheme, making adequate allocation of fund for assets management, training of technical staff on how to maintain and manage procured properties, instilling the spirit of patriotism and ownership among users of these assets and developing of legal framework on assets management, the state of corporate assets will continue to depreciate and it will become difficult for the institute to utilize these assets for the achievement of the goals of the institute

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

One of the reasons for the establishment of public organizations in Nigeria was for the purpose of using them to provide jobs and to render social services rather than profit making enterprises (Ogohi, 2014). However, the government of Nigeria has laid emphasis on the privatization of some of these organizations due to operational

inefficiency (Akinola, 2021). This scenario is in agreement with Shah (2007) who associated the state of dysfunctionality of public sector with corruption, inefficiency and waste of resources in many developing countries. Some common features associated with these organizations are the use of plants, equipment and vehicles in the day-to-day running of the organizations. Plants, according to Bullinger *et al.* (2013) refer to every material means required and available for production to take place in factories. Based on this definition, plants can include; infrastructures like machines for services, buildings, working tools and various types of equipment used in workshops. The failure of these plants is dependent on management practice despite the fact that they are designed to be reliable. It is for this reason that equipment needs to be maintained in order to ensure reliability.

Corporate Public assets, in this context are regarded as assets provided, owned, or being used by government either at the federal, state or local government level. Iwarere and Lawal (2011) noted that these assets can be movable and non-movable, with the former being in form of vehicles, computers, typewriters and other facilities in like manners while the later are non-movable assets like buildings, electricity lines, pipelines for water, whose location cannot be easily changed. More often than not, attention have been given to movable public assets especially plants and equipment. Whichever group that these corporate assets belong, it should not be used to decide the level of attention given to them when it has to do with the management of corporate assets (Tsang, 2002).

Green (2015) further noted that all assets used by public organizations require effective regular maintenance for proper functioning because their level of efficiency has strong relationship with the degree of maintenance given to them. It is sad to note that the main challenge confronting assets management in public corporate organizations in Nigeria is

maintenance. This is why most premises of most of these organizations are littered with broken down equipment and in most case some of these properties rust away under the rain and sun and are ultimately sold off as scraps (Adeyemi and Muhammed, 2017).

The report of the National Research Council (2012) showed that the concept of corporate assets management has become imperative due to the necessity bordering on the improvement of public infrastructures that are experiencing decay throughout government establishments. While adequate culture of corporate assets management is germane to the growth of public corporate organization (Akpa *et al.*, 2021), the absence of efficient culture of maintenance in public sectors according to Bubou *et al.* (2017) and Tijani *et al.* (2016), have been observed to be an insurmountable huddle in an infrastructure-driven national development. It was based on this that Tijani *et al.* (2016) concluded that the reasons why the mandates of most public corporate organisations are not achieved are partly due to absence of a clear-cut corporate assets maintenance policy in the country.

The National Cereals Research Institute (NCRI) Badeggi is commodity research institute with the mandate to improve the genetics cereals crops, sugarcane and soybeans and to undertake research on farming systems and extension in every area of agriculture within the states in the North Central Zone. Since Organizational assets playvital role in actualizing the goals and objectives of an organization, physical needs of members of staff of organizations can be met by providing secured and sufficient facilities suitable for work and comfortable working environment and shelter (Green, 2015).

In line with this quest for efficiency and improved facilities in the institute, there is need for adequate maintenance of corporate assets so that their worsening state can be improved upon in order for the institute to achieve its set mandate.

1.2 Statement of the Research Problem

One of the critical problems facing developing countries is that of inadequate provision and maintenance of corporate public assets (Abumere, 2012) and in the view of Ale *et al.* (2011) the deplorable state of public assets has stood as a challenge to government economic developmental efforts. The poor/ deplorable state of public assets/ facilities especially in public corporate organizations has been noted to be worse in Sub-Saharan African and this is due to inadequate and inefficient management culture. The current challenges confronting Nigeria in terms of economic development according to Olaseni and Alade (2012) may partly be related to the maintenance culture of already provided assets that are needed for efficient running of public corporate organization.

Currently, many equipment and infrastructure in the National Cereals Research Institute, Badeggi are performing below specification and many of them have lost their economic value. These corporate assets range from office facilities, buildings, research facilities, central service laboratories, farm implement, source of power supply and roads. Though, there exist administrative department which incorporates within itself Maintenance and Stores, the frequently observed poor state of corporate assets is an indication of poor maintenance by the organization and the need for the assessment of how these corporate assets are managed in the institute.

Based on this, it has become imperative to look inward and make assessment on how public corporate assets are managed if there must be meaningful progress in the achievement of the mission and vision of the Institute. When this institute is compared

with private sector organizations (where attention is not only focused on results but the means through which results are achieved are constantly addressed), it can be noted that poor attitude towards assets management is an indication of system failure. In addition, when this is compared to the view of Bubou *et al.* (2017) on poor attitude towards maintenance, it can be noted that despite the huge deficit in infrastructure, the problems of sustainability of existing assets in itself will stand as an obstacle to meaningful development and progress in the National Cereals Research Institute (NCRI) Badeggi. Several studies have been done on assets management but not much have been carried out with regards to corporate assets management and how it affects the achievement of set mandates of corporate organizations like NCRI, Badeggi. This study therefore was carried out to bridge this gap.

1.3 Aim and Objectives of the Study

The aim of the study is to assess how corporate property assets are managed in the National Cereals Research Institute (NCRI), Badeggi, Niger State. To achieve this, the following objectives are set to:

- i. Identify the assets categories of NCRI as a corporate entity;
- ii. Examine the condition and state of the assets of the NCRI,
- iii. Examine the factors affecting the management of corporate assets of NCRI.
- iv. Identify the management strategy adopted in the management of the assets of NCRI

1.4 Research Questions

The study shall address the following research questions:

- i. What are the categories of assets in the National Cereals Research Institute, Badeggi?
- ii. What are the conditions of the corporate assets of NCRI?

- iii. What are the factors contributing to the present state of these assets of NCRI?
- iv. What management strategy is being adopted towards corporate assets management in the organization?

1.5 Justification for the Study

The concept of corporate assets management is centered on the fact that their provision and availability in an organization has positive impact on productivity and hence improves efficiency in operation (Gavrikova *et al.*, 2020). It has also been noted that when there is a coordinated effort geared towards adequate management of public corporate assets like buildings, equipment, furniture and facilities of organizations, there will be an enhancement in the ability of the corporate organization to favourably compete in a rapidly changing world (Adegbe *et al.*, 2020).

Corporate assets management is important not only for the fact that it helps to optimize the cost of running an organization, but also necessary for improved effectiveness with regards to management (either in terms of space or assets that are directly related to members of staff) for the actualization of the goals and mission of a given public corporate organisation (Ortiz-de-Mandojana and Bansal, 2016).

Different public corporations own assets and the management of these assets is dependent of some factors which could be in form of human, social and system factors. These factors have different impact on the outcome of the management of these assets. It is therefore necessary for government agencies to embraces regular and formal system of corporate public assets management in order to achieve their stated goals. It is on this premise that this study attempts to make assessment of corporate property assets management of the National Cereals Research Institute, Badeggi.

1.6 Study Area

NCRI as a research institute is located in Badeggi, which is a political wards of Katcha Local Government Area Councils of Niger state. Badeggi lies in latitude 9.0568° N, 6.1434° E of the southern part of the Niger state.

The NCRI, being one of the Agricultural Research Institutes, is under the Nigerian Federal Ministry of Agriculture. Established in 1975, but dates back to 1898, as the Department of Agriculture used by the British for observatory purpose of Botanical Garden in Lagos. In 1954, it metamorphosed to become the Federal Ministry of Agriculture that was popularly known as Moor Plantation. Its main mandate was to conduct researches related to crops and farming practices in Nigeria. Despite the various stages of metamorphosis associated with the institute, its mandate has still be centered around improving the challenges confronting crop production in Nigeria.

The institute maintained its Headquarters as Moor Plantation located in Ibadan but was relocated to the Institute for Rice Research Station, Badeggi in 1984 and has remained its headquarters till date. By reason of reorganization, its mandate transformed to include improve the genetics of rice, surgarcane, soybeans, acha, castor as well as beniseed and this was also extended to engaging in researches related to farming systems and extension services within the North Central States of Nassarawa, Kwara, Taraba, Niger, Plateau, Kogi and the Federal Capital Territory (FCT).

The National Cereals Research Institute (NCRI), an agency of the Federal Ministry of Agriculture and Rural Development, is under the supervision of the Agricultural Research Council of Nigeria (ARCN), from where its funding and coordination take place. The Institute has a governing Board but headed administratively by an Executive Director. This institute is structured into:

- A. Operations which have five technical departments which include:
- i. Department of Research Operations involving rice, acha, cane sugar, soybean, beniseed and castor.
 - ii. Department of Outreach Research which include systems of farming research, research on extension and services, consultancy services, commercializing results of research, development of human resources and food technology.
 - iii. Department of planning, monitoring and evaluation whose duties is centred on budget, monitoring and evaluation.
 - iv. Department of Research Support Services which include service laboratory (which must be in good state), Management of farms and the department of Biotechnology and Seed Production whose equipment must be adequately maintained in order to be efficient.
 - v. Agricultural Engineering Department (Engineering and Design, Fabrication Process (General), Mechanization and power). This department controls machines, tractors, plants and vehicles which must be maintained effectively for utmost result.
- B. Services Department is made up of three sub-department like the Administration, Finance and Information and Documentation. The information and Documentation Unit include the Institute's Library, records of breakthrough in research, Printing section and management of internet facilities. Adequate provision and maintenance of assets in this department is vital in order to have easy access to information obtained, storage of information in soft and hard copies and printing and publication of research breakthroughs needed to make meaningful impact for the development of the county.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

Studies undertaken with regards to the management of public assets cannot be complete if the fundamental concepts of the nature and functions of public assets is neglected (Ajayi *et al.*, 2021). In the management of public corporate assets, the definition of each asset should as a matter of importance be conceptually and operationally defined in order to have a clear cut characteristics and classification (Abhayawansa *et al.*, 2015). It is based on this that the objectives and goals of a given assets management is classified based on the missions of any corporate organization. This is why Haynes *et al.* (2017) noted that issues related to the management of public asset should be explored with these goals in mind; improvement of asset performance, its effectiveness and efficiency when it has to do with corporate public asset.

2.1.1 Definition and classification of public assets

The definition of assets is perspective dependents and hence can be viewed from different perspectives. Biondi and Lapsley (2014) noted that from the view of accounting, assets can be viewed as resources acquired or owned by an organization through past events that they were involved in and with which economic benefits can be received in the future. El-Tawy (2020) considers it as the possible fiscal benefits that an organization acquires or controls because of previous transaction it was involved in. It is based on these two definitions that the International Accounting Standards Board (IASB) made a proposition about a working definition of what assets should be. Hence, an asset is defined as what a person or an organization has the right to and has the capacity to create economic benefit to the entity (El-Tawy, 2020). In a broader

perspective, by the implication of these definitions, the following can be considered as some of the features of assets:

- i. Having the right or access to the control of a given thing and denying others access to the given thing;
- ii. A scarce and valuable economic resource;
- iii. Having the tendency to create economic benefit;
- iv. An accomplished transaction that can make an entity to have right over the control of the associated benefits (Öztürk *et al.*, 2019).

Two common features of assets with regards to balance sheet are:

- i. It is not completely related to ownership since assets equals to liabilities in addition to equity; equity itself equals to net assets (Garbinti *et al.*, 2017). By implication, an asset does not automatically imply net assets. The other feature of assets is that it is the expression of what the financial statement shows with regards to date of the balance sheet (Renner, 2007).

Assets have also been defined in terms things that are tangible (like, cash, real estate, and equipment) and things that are intangible (like patents, trademark, trade name and franchise). With regards to tangible assets, it can further be grouped into immovable and movable types. The immovable (fixed) assets like the real estate which cannot be used after being moved and the movable ones that are still useful even after they are moved and this may include among other like vehicles, office equipment and furniture (Viljoen, 2014). In the field of accounting, two categories of assets are made: current assets and non-current assets. The former include cash and its equivalence, short-term investments, receivable tax, stock and prepaid expenses while the later include long-term investment, all fixed assets that include land, building infrastructure, roads, housing,

equipment and tools, a system of water distribution and furniture (Viljoen, 2014). A typical classification of public assets as noted by Viljoen (2014) is shown in Figure 2.1

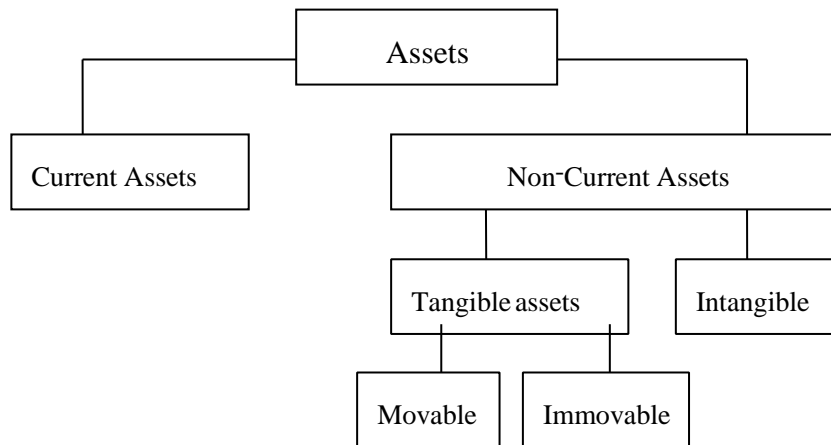


Figure 2.1: Classification of Public Asset
Source: Viljoen (2014)

An asset is obtained in by government in a way that is different from that of the private business obtain theirs. On the part of government, revenue is gotten by means of statutory authority whereas private businesses obtain revenue through the sales of goods and rendering of services. It is based on this that an asset is considered to be a public economic resource with regards to corporate public organizations and this with regards to government are economic resource that are controlled by the government due to past transactions/ events (Viljoen, 2014). In general terms, a public asset is an essential means that governments use for the provision of public services and essential goods.

From a management perspective, Saraubon *et al.* (2019) grouped public fixed assets in three forms and this is based on they are used for and their functions:

- i. Fixed assets that are used by government and this includes offices, fire stations, police stations and warehouses and water board.
- ii. Fixed assets used to meet social needs in the society like school building, hospitals, recreational facilities, housing schemes and parks.
- iii. Surplus fixed assets

From the work of Hentschel and Utter (2016) it was reported that the core assets that government uses to achieve its goals in the delivery of services are the government-use assets and social-use assets. But with regards to the surplus fixed assets, they are considered to be non-core assets which only play supplementary or complementary roles in service delivery by the government.

2.2 The Concept of Asset Management

Asset management has been defined and described differently by different sources. According to the Royal Institute of Chartered Surveyors (RICS) (2008), asset management is defined and described after considering and evaluating several published definition. It is defined as an organized process aimed at getting monetary value from property assets in the course of meeting the needs of a given public organization.

Asset management is characterized by:

- i. Adopting integrative approach (Edwards, 2010) ;
- ii. Adequately making a definition of what service levels and standard of performance is and then restraining them within the strategic planning objectives;
- iii. an optimized investment decision-making approach;
- iv. making use of a long-term (lifecycle) approach in the management of assets (Amadi-Echendu, 2021);

The integrative approach involves the combination of managerial, financial, economic and other activities in the managing public corporate assets and is done in a systematic and coordinated manner (Rebelo *et al.*, 2016). The Audit Commission (Abdullah and Razak, 2011) noted two strategies as approaches in the management of the properties of corporate organizations and these include strategic property consideration and property services as shown in Figure 2.2.

Strategic property considerations: this involves making decisions with regards to how many assets is needed, the type and place where they are cited so that objectives of the organization is met. This helps to ensure that these corporate properties made to align with the goal and objectives of the corporate organization (RICS, 2008). Strategic property considerations ask questions such as:

- i. In which location should the property be sited?
- ii. What are the reasons for citing the property at a given location? and
- iii. What magnitude of the property is required to adequately support the needed service?

Property services: this involves services relating to property management and services related to the technicalities of the profession as indicated in Figure 2.2.

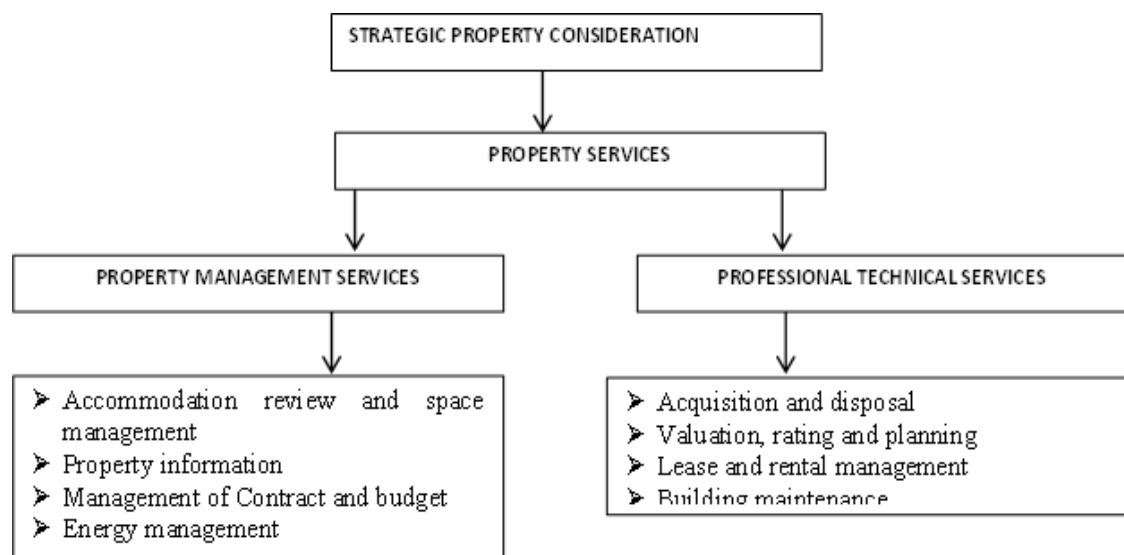


Figure 2.2: Strategic property considerations and property services
Source: Royal Institution of Chartered Surveyors (2008)

The essence of property services is the delivery of the objectives of strategic asset and this is accomplished by incorporating professional/technical and management work which are vital in ensuring that assets are in the desired condition, form, layout and location.

Property services include the following:

- i. Making sure the a given property is supplied meets service specifications;
- ii. Disposing off of surplus properties and constructing/ acquiring of new ones;
- iii. Valuing of properties;
- iv. Advising decision makers on best practices with regards to the management of operational property assets.

Two elements can be deduced from the different activities related to property service; property management (PM) and facilities management (FM).

In the view of Lim *et al.* (2013), facilities management services is involved with the coordination of the needs of people, equipment that are used and the various operational activities that take place in the work place. Attention is given to providing quality working environments by means of facilities design, conserving energy and having control of the environment. (Ali *et al.*, 2015). Viewed differently by Edwards and Ellison (2009), it involves taking care of buildings so that the satisfaction of occupiers is met. On this premise, facility management and property management can be considered to focus on premises even if their activities in meeting their objectives differ. Koleoso *et al.* (2015) noted that the core of PM activities, also known as estate management, involves:

- i. Valuation of property;
- ii. Acquiring and disposing off of buildings;
- iii. providing advice on property investment;
- iv. Administration of leases;
- v. Administering and accounting for service charges;
- vi. Supervising building repairs;
- vii. Offering advice on the review of rent and rating;
- viii. Evaluating properties and accommodation in a strategic manner.

On the contrary, in the view of Koleoso *et al.* (2015), facility management include the following activities:

- i. Controlling of operation budget and the cost of occupancy;
- ii. Building maintenance and management;
- iii. Deciding which kinds of furniture is required;
- iv. Allocation of space and what they are used for;
- v. Supervising cleaning activities;
- vi. Making sure that security of properties, telecommunication services and information technology is provided.;
- vii. Provision of services like catering and support services;
- viii. Taking care of the purchase of material and equipment for the organization;
- ix. Managing and maintenance of office equipment.

In practical terms, though the roles of property management and facility management are different, they still share common roles and this is observed in the interface shared between them in an organization as indicated by Figure 2.3.

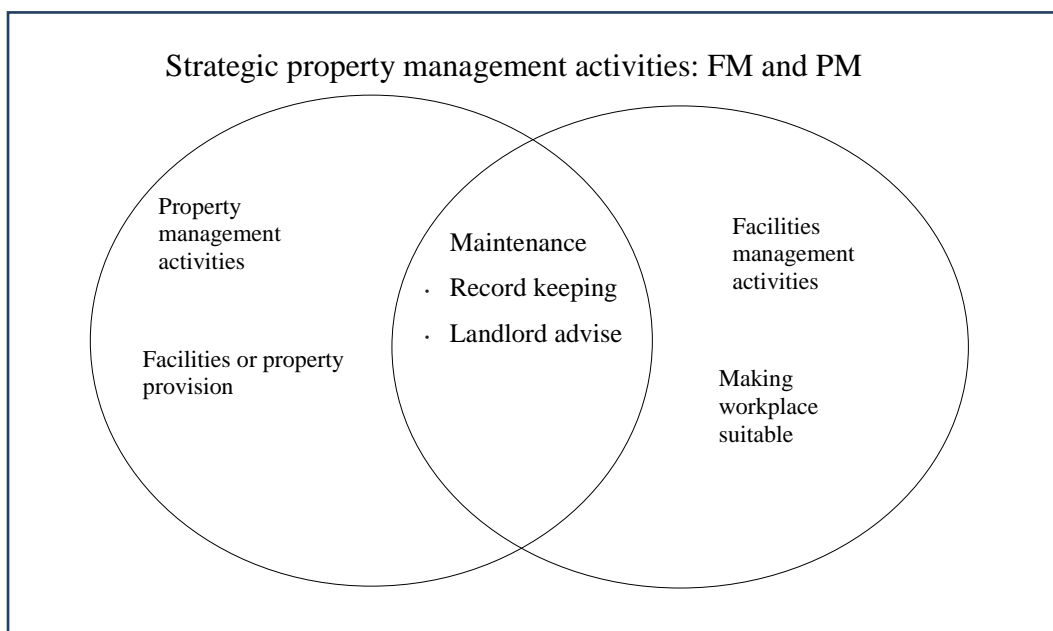


Figure 2.3: Asset Management: FM and PM activities
Source: Koleoso *et al.* (2015)

2.3 Benefits of Asset Management

Findings from other studies have shown that integrating FM and PM (which is the core concept of asset management) enhances the means of actualizing the objectives of public sector organizations. Some of these include:

- i. The adoption of a comprehensive and long term perspective of managing assets makes it an effective approach of property management (Malawi and David, 2016).
- ii. Innovation and efficiencies can be promoted simply by benchmarking of conditions and performance in the management of assets (Malawi and David, 2016).
- iii. With asset management, there is a well organized approach in terms of programme tailored towards a long-term change. This is because property assets are normally slow in responding to change.
- iv. Some business benefits achieved as a result of the adoption of asset management framework include:
 - a. Improvement in accountability and governance (Ngwira, 2015);
 - b. Service and customers' satisfaction is improved;
 - c. The way risk is managed is improved (Malawi and David, 2016);
 - d. Improvement in financial effectiveness;
 - e. Improvement in terms of making decisions.

In corporation public organizations, some of the benefits that can be seen as a result of effective management of corporate assets include:

- i. Improved governance especially with regards to stewardship of property assets.
- ii. Improved accountability with regards to the use resources (Malawi and David, 2016). With the use of performance indicators in place, corporate public

organizations are given benchmark on asset management performance and their results can be marched against other or similar public sector organisations (Ngwira, 2015). The essence of having a benchmark is to make sure that corporate public organizations provide steady improvement in the management of assets under their control in a systematic and coordinated manner.

- iii. In the view of Liu *et al.* (2016) users of corporate public assets enjoy optimum satisfaction in terms of availability and efficiency of these assets because they are managed well.
- iv. The presence of effectiveness in managing assets results in the improvement of risk management. In the view of Harrison (2021), practices and the processes involved in managing assets makes it possible to access the probability and what failure can cause and then identifying how to address issues that can sustain services.

2.4 Development of Asset Management in the Public Sector

To undertake how asset management developed, it will involve the investigation of forces that have driven assets management adoption in corporation organizations. This also involves tracing the trends of the asset management development both locally and globally.

2.4.1 Origins of asset management

The perspective or the origin of asset management has been confronted with divers opinion by various scholars, researchers and commentators. Despite these diversities, there is still an agreement that asset management actually evolved from other fields. In the view of Edwards (2010), the concept of assets management emanated from activities that have been taking place for years but has just been separated in recent times. This is

not far from the view of Herd-Smith and Fewings (2008) who noted that asset management is not new but can to limelight a few decades ago during the industrial age. It is important to noted that the phases of the development of asset management have incorporated within itself ideas and techniques from other disciplines. This is why Herd-Smith and Fewings (2008) noted that there have been gradual but continuous introduction of some of these techniques into businesses management and frameworks that support them.

It is difficult to state categorically that a particular nature and type of business activities resulted in asset management. In the view of Too (2010), asset management evolved majorly from the North Sea oil and gas industry of the United Kingdom between the later parts of 1980 and the early parts of 1990s. What catalyzed change was the desire for businesses to fight for their survival in the later parts of 1980 which were the effects of Piper Alpha disaster and when oil price fell (Ngwira, 2015). This caused companies and organizations to be involved in proffering better approached in the management of their assets. This resulted in the introduction of an initiative called CRINE (Cost Reduction in the New Era) by most oil and gas industries. The CRINE initiate was a challenge to previous practices and made businesses to create units/ department within them for the purpose of assessing performance accountability and investigating reasons for failure in achieving set out goals and objectives. This resulted in noticeable drop in cost of managing an organization and hence the term asset management gave to limelight (Ngwira, 2015).

2.5 Public Assets Management

Asset management, according to Abdullah *et al.* (2012) is defined as optimizing property value; beginning from when it was acquired to the point when it is disposed off

within the objectives of the owner. This is defined in a broader scope which involves functional management of property assets in terms of either from investment perspective or operational aspect. Based on this definition, the objectives of fixed asset management can be identified; optimizing value for property portfolio (Abdullah *et al.*, 2012). Generally, it can be deduced that assets that are used for investments have these features:

- i. Can be used to generate a return on capital;
- ii. They can appreciate in value especially if it is a long-term ownership;
- iii. When owned for operations, there is expectation that it can support the business that owns uses or occupies it (Lu, 2011; Caldecott *et al.*, 2021).

Fixed assets, when it has to do with public sector, are not acquired for commercial investment but are considered to be economic resource used by government in the fulfillment of its goals of delivering services to the public. Hence, the main achievement desired in the management of public fixed assets is providing services for the fulfillment of government responsibilities instead of just having a flow of cash or making profits (Lu, 2011).

Hanis *et al.* (2011) views asset management as a process of making decision, implementing decision made with regards to assets acquisition, its use, managing it and then disposing them off. This is applicable in both public and private sector in which assets are acquired, utilized, managed and later disposed off when its economic value is not too profitable to the owner. Specifically, these activities can involve taking inventorying on these assets, valuating and making reports of the state of these assets (Campanaro *et al.*, 2017). Conversely, the strategies involved in the implementation of these corporate assets may differ from how it is applied in the private sector. The private sector assesses the financial performance of each of the assets with regards to all the

assets collectively (Constantin *et al.*, 2018). This helps them to gather vital information relative to what should be acquired, what assets should remain and which of them should be disposed off. This is contrary to what is obtainable in the public sector as noted by Lu (2011) that performance evaluation of corporate property assets are hardly undertaken over time. Very few government agencies measure the performance of their fixed assets in monetary terms. Some of the reasons that lead to these inactive corporate asset management practices include:

- i. Considering these assets as free goods (Hanis *et al.*, 2011). Since most users of corporate assets are given these assets to use freely, most of them do not really appreciate their value and hence not careful when it comes to managing them.
- ii. No common standard in the measurement of performance of assets and services. Hence it becomes impossible to measure what corporate assets that are owned by government contribute to the organization (Lu, 2011).

Other noted factors that affect the condition and use of corporate public assets in the view of Coppola *et al.* (2014) are:

- i. Political influence,
- ii. Legal framework,
- iii. Regulations,
- iv. Organizational arrangement,
- v. Administrative decisions, and
- vi. Composition of stakeholders.

In most public corporate organizations in Nigeria especially government agencies like the National Cereals Research Institute (NCRI) Badeggi where goods are not produced and services are not provided for direct economic profits, it can be noted that corporate properties assets that are acquired and services provided are done to simply fulfill the

mission of the agency and to provide workplaces for the employees (Adeyanju, 2012). It can also be noted that the concept of assets management is mainly to how these assets are used in an efficient and productive manner but contrarily, little is achieved in terms of efficiency and productivity due to inherent attributes of circumstances surrounding public sectors in the Nigeria society as noted by (Hanis *et al.* 2011; Lu, 2011; Coppola *et al.* 2014).

2.5.1 Driving forces for efficient and effective corporate public asset management

It was noted by Hanis *et al.* (2011) that one of the challenges confronting effective and efficient management of public asset is that these assets are considers as free goods. The main forces that make the demand for efficient and effective management of public assets include:

- i. Making use of better management movement;
- ii. Need for profit as a result of assets acquired;
- iii. Improvement in accounting and
- iv. Adopting practices in private sector in managing government owned corporate assets (Hanis *et al.*, 2011).

The desire for a new and efficient public management was borne out of government response to the financial crisis in the 1970s. The purpose of this type of management is for government to work better with less cost in order to improve on performance and efficiency (El-Ghalayini, 2016). For this to be achieved, efforts is to be made by government in restructuring bureaucratic functions and then channel government operations to areas where it is needed most. In the view of Bertot *et al.* (2016) some of the principles to be adopted by government for the transformation of governmental functions so that services can be improved are:

- i. Doing more steering and less rowing,

- ii. Creating an environment constructive competition in public sector;
- iii. Making an organization to be driven by mission,;
- iv. Funding outcomes rather than inputs,
- v. Making the system to be customer oriented,
- vi. Decentralization of decision making
- vii. Making service delivery in public sector to be market- oriented. .

For these principles to be implemented, government agencies adopt the concepts of privatization, measuring performance, making use of strategic planning, employment of private-public-partnership, outsourcing and other similar principles as applicable in private sectors. These have helped public assets managers in redefining the goals and objectives of public asset management. Assets management practices among private sectors have substantial influence on how public asset is managed in public sectors (Kaganova, 2012). Findings have shown that the practices of asset management in corporate organization lags behind what is obtainable in private sector in many ways as indicated by Lu (2017) and these include:

- i. Taking inventory of property centrally,
- ii. Evaluating property,
- iii. Making sure there is a documentation of acceptable standards
- iv. Making of decision and
- v. Development of property.

These aforementioned driving forces significantly influence the determination of the objectives of property asset management. It can also be noted that these factors also promote the formulation of policy on the management of corporate public assets so that they:

- i. Meet the need of users and beneficiaries (Kaganova and McKellar, 2012),
- ii. Contribute to restructuring asset management in any given corporate entity (Johnson, 2004).

It is based on this that Kaganova (2012) asserted that these driving forces has helped to shape the way corporate properties are managed especially in the introduction of the concept of public-private-partnership (PPPs) when it has to do with inventory taking of properties, evaluating and reporting of the conditions of corporate public properties. These if fully implemented and adopted in the study area will make assets management to be done more effectively and efficiently in order to accomplish the set mission of the agency.

2.6 Factors Influencing Achievement of Public Asset Management Goals

Various tiers of governments have arrays of assets (Kaganova, 2012) and these assets are utilized with the aim of contributing to public services and in the achievement of the mission of government parastatals. From the point of view of management, the management of corporate public assets requires the provision of suitable services for the achievement of the goals of the given agency. Alternatively, there should be effective services running at low cost and at the same time optimizing the value of property portfolio of the agency. With these in mind, it has been noted that there exist hindrances to the processes involved in public property assets management and these have stood as huddles in the achievement of the goals and objectives of the management of corporate public assets. Some of these challenges include:

- i. Inadequate recognition of the function of corporate public assets in strategic planning and budget (National Research Council, 2012). Issues related to this have not been incorporated into the agenda of a government's strategic planning that focuses on the long-term mission of the government. Issues related to

corporate public assets are only discussed by policy makers when budget requests are reviewed especially when new assets are to be acquired. As a result, the cost of management of these assets in their full life cycle is not regularly considered. This is in agreement with Mukori (2013) who noted that when government is confronted with shortage of funds for life-cycle maintenance as in the case of economic recession, corporate properties deteriorate quickly and their life cycle grows shorter than expected. Deferred maintenance also implies that the corporate asset loss quality and reliability and may not be adequately efficient to serve the agency that requires the public services.

- ii. **Fragmentation of Asset Management:** This is the absence of centralized property management authority. The management of public assets/ facilities in most government agencies is fragmented thereby leaving assets management in the hands of users (Kaganova, 2012). Under fragmented management, government loses the advantage of the economy of scale. When government lacks unitary strategies, rules, and policies, fragmented management may bring about deficiencies in serving agencies, thus making it hard to fulfill the goals and objectives of public fixed asset management.
- iii. There is not accountability and transparency of the process of management. The live span of some public assets are shorter when compared to the whole corporate property assets and for this reason they depreciate is value more easily. This deterioration takes place over a period of time which makes it necessary for efficient stewardship on the part of managers. It is the duty of managers to identify potential deterioration before they cause major problems. But it is observed that there is no incentive to motive senior executive to make

extra sacrifices in identifying potential deterioration of assets (National Research Council, 2012).

Conclusively, for the fulfillment of the goals and objectives of corporate assets management in public organization, there is need to incorporate into their daily operation many of the desirable, effective approaches employed in management of assets as is applicable in property management practice in the private sector (Hentschel and Utter, 2016).

2.6.1 Challenges of public assets management in Nigeria

According to Conte *et al.* (2022), an adequate and efficient property asset is a must-have for any corporate public organization to function competitively. These assets are in dire need of maintenance and require update if the organization is to run smoothly. However, over the years, the property assets belonging used by many public organizations in Nigeria have witnessed deterioration in terms of quality and function (Conte *et al.*, 2022) and this scenario is contrary to what is obtainable in most developed nations like the United States, Germany, France, Hong Kong, Singapore, Netherlands, United Arab Emirate, Japan and Switzerland (World Economic Forum (WEF), 2017). Unfortunately, Nigeria languished in the bottom of the table and came 133rd out of 140 countries rated. It was also reported that Nigeria losses a much as two billion dollars annually as a result of lost confidence in health care infrastructure/ facilities and according to Nchuchuwe and David (2015), these occurred as a result of deteriorating infrastructural facilities born out of poor management practices of public property assets in many public corporate organizations in Nigeria. Some of the challenges confronting the management of public property assets in Nigeria include:

- i. **Wrong initiation and delivery of infrastructures:** the provision of infrastructure is a means of solving certain needs of the people and not the solution itself. The need for a given infrastructure must be assessed, a feasibility study carried out before delivering the given infrastructure. Most contract awarded for infrastructure provision are not done because of their needs in solving existing problem but are done just to compensate cronies and allies. One of the reasons why there is stagnation in the economic development of Nigeria is because of absence of understanding of developmental processes (Mohammed, 2012).
- ii. **Lack of effective monitoring and evaluation of projects:** Monitoring and evaluation (M&E) of property assets is a programme of continuous improvement. M&E in this context refers to the process of monitoring the performance of these property assets and how it impacts the purpose of its construction and uses in line with the vision of the agency under which it is acquired (Ogohi, 2014). These facilities, be it buildings, vehicles, roads, office facilities or even land space must be regularly monitored and evaluated so that they can attain their stipulated life cycle.
- iii. **Lack of finance:** though some developed countries recorded signs of deterioration in the quality of infrastructural facilities with some economies spending as much as 70% of their public investment on the maintenance of these facilities, Nigeria has lagged behind in allocating adequate fund for the maintenance of public properties assets in most public corporate organizations (Kirkpatrick, 2009). Taylor (2007) further reported that Nigeria's annual investment for 15 years is in the order of \$15bn in order to adequately manage

and maintain public property assets in the various public organizations nationwide.

- iv. **Poor quality of infrastructure:** majority of infrastructure provided are of poor quality. In the delivery of infrastructure, some basic steps are involved: engineering, procuring, constructing, installing and commissioning (EPCIC). Engineering itself involves conceiving, planning and designing. This is the process of procurement of infrastructure. The challenge confronting quality of infrastructure assets provided in Nigeria is hinged on conception, planning and designing.
- v. **Lack of technical know-how:** Nigeria suffers from deficiency of the technical know-how for the management of some infrastructure especially imported assets like modern healthcare equipment, transmitters, telecommunication gadget and similar assets. Some of these assets deteriorate quickly over time due to the fact that their technology is alien and when in some cases parts of the product are in need of repair, they are either obsolete or difficult to obtain. Hence some of these assets rot away and abandoned.
- vi. **Lack of ownership:** Nigerian public do not show any sense of ownership with regards to public assets in government agencies/ parastatals. They generally see public property as nobody's property. This attitude is born out of absence of patriotism and lack of commitment for common national growth and development. Akpan and Riman (2012) noted that instead of nationalistic approach, some members of staff of these public organizations see these assets as no one's property and prefer to wait until "government" take up the role of maintenance. This has resulted in late repairs and in most cases these public properties assets are seen littered as scraps in most of these agencies. These

range from cars, tractors, office facilities, roads and even to dilapidated office complexes and staff quarters.

- vii. **Lack of legal framework:** For maintenance to be effective there is need for a legal framework in which the responsibility for a given maintenance is assigned. This should also include mandating suppliers and contractors to be responsible for the maintenance of infrastructure they provided for at least five years.
- viii. **Corruption:** the nuisance of corruption has continued to prevail in the maintenance of corporate public assets in Nigerian (Iheukwumere *et al.*, 2020).
- ix. **Lack of maintenance economy:** the major challenge confronting the development of Nigeria economically is the absence of a coordinated effort towards the implementation of national and sub national framework aimed at ensuring sustained maintenance policy of public (Ajakaiye and Jerome, 2019). It is imperative to develop and sustain a maintenance policy for acquired assets if they must be used for the purpose for which they were procured.
- x. **Bad political environment:** due to the continued turbulent political system in Nigeria, most private sectors are encumbered with the fear of doing businesses with the government on credit because the government, in most cases, delay in the payment of services rendered and infrastructure procured for them.

2.7 Empirical Studies on Corporate Public Assets Management

Several studies have been undertaken on the management of corporate public asset in Nigeria.

Durodola and Oloyede (2011) made an empirical determination of property assets management styles in South-Western Nigeria Hotels. The study investigated hotels' property assets management styles with a view to fashioning out appropriate management methodology and develop an integrated resource management framework.

Data were collected from hotel organizations' management, general managers, staff and customers. Information obtained was complemented by the physical assessment of hotel structures and system operations. Stratified sampling technique backed by cluster sampling was used. Descriptive statistics was employed for statistical analysis. Findings showed that maintenance management predominates the industry which includes established written standards for assets management, effective decision making systems and a robust centralized system of inventory taking of properties. The study recommends that Nigeria Tourism Development Corporation should develop a framework for quality assurance policy improvement among hotels in Nigeria. By so doing, hotel management companies and intending property development and management companies would be guided and buoyed into doing things beyond benchmarking.

Oladokun (2013) examined corporate real estate management practice in Lagos, Nigeria. The study focused on the attitude of business executives on the use and adoption of corporate property management in their organisations. Questionnaires were administered to fifty (50) senior real estate officers of 21 banks, 5 GSM providers and 24 insurance companies in Nigeria in order to obtain information about their attitudes to the use and adoption of corporate assets management in their organisations. The data were analysed with the aid of descriptive statistical analysis. Findings show that Nigerian companies adopt a reactive approach in terms of management style that was statistically lower than that operational in advanced countries. It was concluded that corporate executives in the sampled firms attached little value to the use of corporate property management in their organisations because they were only driven by the need for brand development and client satisfaction.

Firdauz *et al.* (2015) examined how value can be added to constructed facilities with the aim of examining the impact of service contact on the perceived quality and nature of accommodation package in Nigeria. Survey questionnaire was employed for gathering data while personal construct theory was used for analysing generated data. Findings showed that a very large proportion of the products of hotels relates to the management attitude of owners of the properties. These include the absence of the knowledge of life cycle planning, lack of proactive maintenance policy, frequently confronted with non-availability of resources to meet the changing demands in the management of the properties. It was concluded that for hotel accommodation package to satisfy customer needs, it must be accompanied by intangible services such as security, a feeling of well-being.

Odediran *et al.* (2015) examined assets management practices in the Nigerian public universities. It also examined factors influencing the practices and strategies for sustaining facilities condition. Data were collected through a well-structured questionnaire administered on both the technical and managerial officers in charge of the university facilities and these data collected were subjected to both the descriptive and inferential statistical tools. Findings showed that Nigeria public universities are passive in terms of actions taken to manage facilities, even when most are obsolete and deteriorated. The major challenges identified include low level of technology, poor funding and poor policy implementation. This, in effect, affects job performance of employees of public corporate organization because of poor level of performance of equipment required to carry out their daily routine in their various work place.

This current study is set to identify the asset management of corporate properties in the Nigerian Cereals and Research Institute, Badegi.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research design

This study made use of description research survey which is useful in the identification of attributes of larger population using a smaller group of persons. The design was suitable for the study as the study sought to assess Corporate Property Assets Management in Nigerian Cereals and Research Institute NCRI, Badeggi, Niger state.

3.2 Data Type and Source

3.2.1 Primary data

Primary data collected include the types of corporate assets in the institute, sources of electric power, source of funds in the institute, who funds maintenance processes, who is responsible for repairs, how often is routine maintenance undertaken, responses to complaints made with regards to facilities needing repairs/ maintenance, what facility management policy is adopted in assets management and other related information required for the security and maintenance of assets in the study area.

3.2.2 Secondary data

Secondary data were obtained from the directory of the Nigerian Cereals and Research Institute NCRI, Badeggi, Niger State.

3.3 Population of the Study

The data for the study were obtained from members of staff of Nigerian Cereals and Research Institute NCRI, Badeggi, Niger state, which cut across various sections of both operations and Services Department.

3.4 Sampling Technique and Sample Size

Sample is the set of people or items which constitute part of a given population sampling. The Institute is made up of eight departments as indicated in section 1.6 of the study area. This include the Operations that is made up of five (5) departments and Services, that is made up of three (3) sub-departments; Administration, Finance and Information and Documentation.

From each of these eighth (8) Departments, three (3) respondents were selected in accordance with the Snowball's non-probabilistic sampling techniques to make a sample size of 24 people. In the Snowball's sampling technique, it is believed that having different set of population in which it is difficult to access every participating person, it is possible to obtain information from every group if one from each group can be accessed on the ground that that particular person has the capacity to contact another person and the person contacted can contact others and so the chain continues until sufficient information is obtained from each group. Hence, from each of the department three persons were selected and each of the selected people can contact other members of the department in terms of information required from him in the administered questionnaire. Hence a sample size of 24 was chosen for the study.

3.5 Instrument for Data Collection

Some of the instruments used for data collection include:

1. **Questionnaire:** The questionnaire (shown in Appendix II) designed for respondents in the study area contain four (4) Sections, section A deals with the questions on Socio-Demographic Profile of the respondents, section B deals with the categories and current conditions of the identified assets in the study area, section C deals with the factors affecting the condition of the assets while

section D deals with the management strategy adopted and challenges confronting the effective management of corporate property assets in the study area.

2. **Personal Observation:** Personal observation was adopted to assess and examine the condition of the identified assets in the study area.
3. **Oral Interview:** The various head of department and section were also orally interviewed to gathered information on the policies for their schedule of routine maintenance for the various categories of the identified assets.

3.7 Method of Data Analysis

Objective one identifies the categories of assets in NCRI. Since data obtained are quantitative in nature and are gathered through primary source (through physical observation), a checklist method was adopted for this objective and tables were used for the representation of observed information.

Objectives two involves the determination of the condition of the assets identified in the study area. The data needed are quantitative in nature and were gathered through primary source (some members of staff of the various section of both operations and services department) in order to seek their opinion on the condition and the performance of the assets in the study area. A 5- Point Likert Scale was adopted for this objective to achieve the technique for ranking order using mean value. Opinion of respondents sampled be on their perspective on questions asked. For statements that the respondents Strongly Agree, it was scored 1, Agree = 2, Undecided = 3, Disagree =4, Strongly Disagree = 5

Objective three involves the identification of the factors affecting the condition of the assets in the study area. The data collected are quantitative in nature and were used to compare with the ideal management strategies expected in the management of corporate property assets in the study area. Table will be used to present the data. Relative Importance Index RII was also adopted to analyze and rank this objective.

$$RII = \frac{\Sigma W}{A*N} \quad (1)$$

where:

W = Weighing given to each statement by respondents and ranges from 1 to 5;

A = Higher response integer (5); and

N = Total number of respondents. Relative Importance Index

Table was re used for data presentation.

Objectives four involves Identify the management strategy adopted in the management of the assets of NCRI. This includes how these assets are used in comparison with the organization's assets management policy in the study area. The use of checklist to compare observed assets management practices and the organization's stated assets management policy obtained from the gazette of the information and records department in the study area was adopted.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Results

The Table 4.1 present response rate, of the copies of questionnaire distributed and collected.

Table 4.1 Copies of Questionnaire Administered and Returned

S/N	National Cereal Research Institute	Copies of Questionnaire Administered	Copies of Questionnaire Returned	% of Returned Copies of Questionnaire
1	NCRI	24	24	100

Table 4.1 showed that all the 24 copies of questionnaire administered were filled and returned despite the fact that at the time of field work, the Institute was not in operation due to industrial action of the members of staff. These questionnaires were handed over to heads of departments who helped to locate the appropriate personnel required to give useful information regarding answers to questions in the questionnaire. It only a handful of principal officers and some selected stakeholders who were contacted were able to fill the administered questionnaire.

4.1.1 Demographic distribution of respondents

Table 4.2 shows the distribution of the respondents according to working experience. The respondents who have worked between 10 -15 years have the highest number followed by respondents with 6-10 years working experience and then respondents with 16 years and above working experience. This implies that responses were received from respondents with adequate knowledge and experience with regards to how the Institute's properties are management in the study area.

Table 4.2: Distribution of Respondents according to Working Experience

S/N	Working Experience	Frequency	Percentage
1	0 – 5 Years	2	8.33
2	6 – 10 Years	6	25.00
3	10 – 15 Years	11	45.83
4	16 Years and above	5	20.83
	Total	24	100.00%

Table 4.3 shows the distribution of the respondents according to educational qualification. The highest group is that of the first degree with either HND or B.Sc with response of 41.67% followed by OND/NCE/Diploma that constitutes 20.83% response and then the Ordinary Level (WASSCE) group which constitutes 16.66%.

Table 4.3: Distribution of Respondents According to Educational Qualification

S/N	Working Experience	Frequency	Percentage
1	WASSCE/SSCE	4	16.66%
2	OND/NCE/Diploma	5	20.83%
3	Graduate: HND/B. Sc	10	41.67%
4	Masters/ PhD.	2	8.33%
5	Professional	3	12.50%
	Total	24	100.00%

The groups with the least number of respondents are those with Masters/PhD and Professionals who are the Heads/ Directors of Programmes and the coordinators of special field operations respectively.

4.1.2 Analysis of Research Questions

4.1.2.1 Categories of assets in the national cereals research institute, Badeggi

This section discusses the categories of assets in the study area. It shows the total number of listed assets, the number of assets in active usage and the ones that are broken down as shown in Table 4.4.

Table 4.4: Categories of assets in the National Cereals Research Institute, Badeggi

Categories of Public Assets	Total number	Broken down	Active	Percentage of active items
Buildings	34			
Office	13	-	13	100.00%
Staff Quarters	16	-	16	100.00%
workshops	4	-	4	100.00%
Clinic building	1	-	1	100.00%
Vehicles	38			
Official vehicles	15	6	9	60.00%
Project vehicles	23	8	16	69.57%
Generators	15			
27 KVA Mikanu Generator	6	5	1	16.7%
5 KVA Generator	9	7	2	22.2%
Tractors and Machines	40			
Small horse power	13	8	4	30.8%
Large horse power	17	7	10	58.2%
Rice Processing Machines	25	17	8	32.0%
Boreholes	5	2	3	60.0%
Printing Machines	13			
Printers	9	4	5	55.6%
photocopiers	4	3	1	25.0%

Source: National Cereals Research Institute, Badeggi

Table 4.4 shows the distribution of some assets according to their categories. It further showed that all the buildings (office complex, staff quarters, workshops and the clinic)

are all actively in use by the Institute. But with regards to the vehicles, only 60.0% of them are in active use and these are official vehicles attached to some principal officers in the study area. It can also be observed from Table 4.4 that only 69.57% of the project vehicles are in active use while 30.43% of them are broken down. Out of the six 27 kva power plants owned by the institute, only one of them is actively working while five (5) of them are not in stable condition. Finding also showed that only 22.2% of the lower power generator sets are in active use which indicates that 7 out of 9 of them are not currently in good state to be used for the purpose of the reason of acquisition. The situation is not different from the conditions of the printing machines and rice processing machines which showed high number of these properties that are not in their expected perfect condition for use. Only 32.0% of the rice processing machines are in good condition of use.

4.1.2.2 The conditions of assets in the study area

This section shows the state of some selected public assets in the institute as shown in Table 4.5. Parameters for interpretation of weighted mean response; 4.50 – 5.00 = Very Good, 3.50 – 4.49 = Good, 2.50 – 3.49 = Fair, 1.50 – 2.49 = Poor, 1.00 – 1.49 = Very Poor. Table 4.5 shows the state of some selected public assets in the institute. It can be noted that with regards to office building and staff quarters, a weighted mean of 4.05 indicates a good condition as noted by respondents.

Table 4.5: Condition of the Categories of Assets Identified in the Study Area

Assets Categories		Very good	Good	Fair	Poor	Very Poor	SUM	MEAN	Interpretation
	Freq. (f)	5	4	3	2	1			
Buildings	Mark (x)	13	4	5	2	0	24		
	f(x)	65	16	15	4	0	100	4.05	Good
Vehicles	Mark (x)	1	5	15	1	2	24		
	f(x)	5	20	45	2	2	65	3.09	Fair
Generators	Mark(x)	1	2	16	4	1	24		
	f(x)	5	8	48	8	0	69	3.05	Fair
Tractors	Mark x)	0	1	3	18	2	24		
	f(x)	0	4	9	36	2	51	2.19	Poor
Borehole	Mark(x)	8	4	10	1	1	24		
	f(x)	40	16	30	2	1	89	3.57	Good
Machines	Mark (x)	1	5	8	9	1	24		
	f(x)	5	3	6	36	2	54	2.20	Poor

Weighted mean score of 3.09 and 3.05 for vehicles and tractors respectively show that all vehicles (articulated and non-articulated types) are only fair in their conditions. Most electric generators owned by smaller units and department are either in shortage of fuel or broken down.

The weighted mean value of 2.19 of the respondents indicates the poor state of condition of tractor. Other major public assets like the Clinic and boreholes are reported to be in good condition. There is a very high affirmation that the boreholes are in good state with a weighted mean value of respondent of 3.57. Hence, access to clean drinking water is never a challenge to members of staff of the institute.

4.1.2.3 Factors affecting the state of the assets in the study area

The work of several authors like Oladokun (2013); Firdauz *et al.* (2015) indicated that assets management in most corporate public organizations are affected by several factors and some of which have negatively the quality of assets management in the study area. Table 4.6 shows respondents responses to factors affecting the state of assets in the study area.

Table 4.6 Factors contributing to the present state of these assets

Factors contributing to the Present State of Assets	N	\bar{X}	SD
Corruption hinders effective management of corporate property assets in the organization.	24	3.78	1.24
There is sentiment (nepotism) in the award of contracts.	24	3.49	1.25
There is poor funding.	24	3.84	1.29
Lack of trained specialists in the Units/Department responsible for assets management.	24	2.25	0.68
Lack of political will to prosecute corrupt stakeholders in the management of the public assets	24	3.64	1.22
Theft/inadequate security system is one of the reasons for the poor state of public assets in the organization.	24	2.33	0.76
Administrative bottleneck is the leading cause of inefficient management of the corporate property assets in the organization.	24	3.46	1.21
Total		3.26	1.09

Table 4.6 shows the Mean and Standard Deviation from respondents at the National Cereal Research Institute, Badeggi on factors contributing to the present state of assets in the establishment. It shows the calculated mean score of 3.78 with Standard Deviation of 1.24 for item one, mean score of 3.49 with Standard Deviation of 1.25 for item two, mean score of 3.84 with Standard Deviation of 1.29 for item three, mean score of 2.25 with Standard Deviation of 0.68 for item four, mean score of 3.64 with Standard Deviation of 1.22 for item five, mean score of 2.33 with Standard Deviation of 0.76 for item six and mean score of 3.46 with Standard Deviation of 1.21 for item seven. It further revealed the grand mean score of responses to the 7 items as 3.26 which was greater than the decision mean. The respondents generally agreed that corruption,

sentiment (nepotism) in the award of contracts, poor funding, lack of political will to prosecute corrupt stakeholders and administrative bottleneck are the leading cause of inefficient management of the corporate property assets in the organization.

The factors that influence the conditions of the assets in the study area were also analyzed using the Relative Importance Index (RII) as shown in Table 4.7.

Having RII values greater than 0.5 implies that the variables significantly influences the adoption of maintenance strategies in managing corporate property assets in the study area. Lack of maintenance policy with RII of **0.9904761905**, misuse of assets by the users with RII of **0.9333333333** and Lack of timely response to maintenance work with RII of **0.8285714286** are the most important factors contributing to the state of the corporate property assets in the study area. Many reasons may be found supportive of these, being an organization with high numbers of assets which lead to increase in maintenance measures required to ensure effective management of corporate property assets in the study area. The less important factor affecting the state of these assets are Lack of Experienced and well trained building maintenance personnel RII of **0.7809523810**, inadequate provision of funds for maintenance RII of **0.7904761905** and Corruption with RII of **0.7619047619**.

Table 4.7: Relative Index of Factors Contributing to the Present State of Assets in the Study Area

Factors		V. Sig.	Sig.	Av. Sig.	Lit. Sig.	Not Sig.	SUM	A*N	RII=($\Sigma W/A*N$)	RANK
	Mark (x)	5	4	3	2	1		5		
Administrative Bottleneck	Freq. (f)	11	3	4	0	6	24	24		
	$\Sigma W=f(x)$	55	12	12	0	6	85	105	0.8095238095	4th
Inadequate provision of funds for maintenance	Freq. (f)	10	3	4	2	5	24	24		
	$\Sigma W=f(x)$	50	12	12	4	5	83	105	0.7904761905	5th
Lack of Proper Leadership efforts	Freq. (f)	4	3	12	1	4	24	24		
	$\Sigma W=f(x)$	20	12	36	2	4	74	105	0.7047619048	8th
Lack of Experienced and well trained building maintenance personnel	Freq. (f)	10	3	3	4	4	24	24		
	$\Sigma W=f(x)$	50	12	9	8	3	82	105	0.7809523810	6th
Misuse of assets by the users (Attitudinal Challenge)	Freq. (f)	12	6	3	2	1	24	24		
	$\Sigma W=f(x)$	60	24	9	4	1	98	105	0.9333333333	2nd
Lack of timely response to maintenance work	Freq. (f)	8	5	7	2	2	24	24		
	$\Sigma W=f(x)$	40	20	21	4	2	87	105	0.8285714286	3rd
Lack of adoption of maintenance policy	Freq. (f)	15	5	1	3	0	24	24		
	$\Sigma W=f(x)$	75	20	3	6	0	104	105	0.9904761905	1st
Corruption	Freq. (f)	8	3	5	3	7	24	24		
	$\Sigma W=f(x)$	40	12	15	6	7	80	105	0.7619047619	7th

4.2.4 Management Strategy Adopted in the Management of Assets in the Study Area

The Corporate Assets Management Policies adopted by the National Cereal Research Institute, Badeggi as reflected in the gazette of the Institute is shown column 1, 2 and 3 of Table 4.8 while the observed maintenance practices is indicated in column 4. This study adopted the use of checklist to compare the Institute's approved standard of assets management with the observed practices of assets management.

Table 4.8: Maintenance Interval for assets in the study area

MATERIAL	LIFE (YEARS)	STANDARD MAINTENANCE INTERVAL (YEARS)	OBSERVED MAINTENANCE
Roofing materials			
Built-up felt	15-20	3-4	No observed maintenance except when there is leakage
Asphalt	20-60	6-7	No maintenance observed
Concrete cement	20 and more	Very durable	No observed maintenance
Asbestos cement	26-40. This is location dependent (Air pollution). It becomes brittle after 40 years.	6-7	No observed maintenance
Zinc	20-40 and more. This is location dependent (Air pollution)	6-7	No observed maintenance except when affected by storm.
Aluminium	50-60. This is location dependent (Air pollution)	6-7	No observed maintenance
Copper	100-300	Very durable	No observed maintenance
Electrical Installations			
Wiring systems	20-30	Any wiring system that is above 35 years is expected to be replaced	No observed routine inspection except when there is electrical fault.

Lighting systems	Depending of the types of lighting system	Routine inspection should be carried out at most every 6 months	No observed routine check except when light bulbs fail to display light. Even at that, some offices, corridors and quarters depend on the good will of some occupants to be replaced.
Water supply and sanitary systems			
Overflow pipes		Periodic check is required based on usage	None observed except when there is failure in terms of operation.
Taps and ball valves		Periodic check is required based on usage	
Bends and channels			
Drains	Depending on environmental control policy of the location	Should be water-tested at an interval of 2-3 years	Drainages are always blocked before evacuation is carried out.
Soak away	Depending of number of people whose wastes are directed to the soak away pit.	Should be empties periodically when it is filled	Covers are broken and take long bureaucratic process for approval to be made for repairs.
workshops	Durability depends on usage and maintenance culture	Quarterly reports on the state of machines and tools. Tools and machines are maintained based on need and usage	Repair and maintenance only when working tools have worn out and completely ineffectual.
Office complex	Most building components last 26-40 years	Monthly inspection of the entire office complex	No observed maintenance of facilities in the office complex
Vehicles			
Articulated vehicle	Durability depends on usage and maintenance culture	Services is based on number of kilometers covered/	Only after vehicles show noticeable problems before repairs a undertaken
Non-articulated vehicles	Durability depends on usage and maintenance culture	Services is based on number of kilometers covered	Only after vehicles show noticeable problems before repairs a undertaken
Tractors			
Small Horse Power	Durability and efficiency depends on culture of maintenance	Should be serviced every 100 hours of use	Services are hardly done and maintenance/ repair is done after machines show noticeable

			problems
Large Horse Power	Durability and efficiency depends on culture of maintenance	Should be serviced every 300 hours of use	Services are hardly done and maintenance/ repair is done after machines show noticeable problems
Rice Processing Machines	Depends on maintenance culture	Daily maintenance is required or at least weekly.	Services and maintenance undertaken during harvesting season and that only when machine develops fault.
Boreholes		Monthly check-up to observe performance of pumping machine and piping systems.	No observed maintenance except when boreholes stop working
Printing Machines		Depending on usage and number of pages printed, toners, drums, and quality of printout are to be inspected and maintained.	Only when printing stops or quality of printing becomes too poor for use.
Cost and method of Financing maintenance/repairs	From Federal allocation Internally Generated (IGFs) and Federal Funds	Official request should be made indicating with proof observed needs for maintenance/ repairs.	Shortage of Funds from allocations. IGFs either sent to Single Treasury Account (TSA) or embezzled at local level.

Source: National Cereal Research Institute, Badeggi, 2021

4.2 Discussion of Results

The study showed a higher proportion of male respondents (80.67%) more than female respondents (19.33%) which imply that male members of staff of the institute are mostly involved in the maintenance and management of corporate properties in the study area.

With regards to years of experience of the respondents, it was noted that respondents between 10-15 years are more in number which represents 45.83% and was followed by those with the experience between 6-10 years representing 25.00% and then those with experience of 16 years and above which represents 20.83% of the respondents. The implication is that the establishment has enough capable hands in terms of years of experience and educational qualification in which about 50.00% are holders of higher national diploma certificate and first degrees.

Various perspectives have been portrayed by respondents with regards to the state and conditions of corporate public assets of the National Cereals Research Institute (NCRI), Badeggi. It can be noted from Table 4.5 that office building and staff quarters with weighted mean of 4.05 indicates a good condition as noted by respondents. Plate I and II show the state of office complex and staff quarters of the NCRI which appear to be in good condition as noted by the respondents.



Plate I: Albert Einstein Bioscience Centre, National Cereals Research Institute (NCRI), Badeggi



**Plate II: Staff Quarters of the National Cereals Research Institute (NCRI),
Badeggi**

With regards to cars and other project vehicles, a weighted mean of 3.09 is an indication that most of the vehicles (articulated and non-articulated) are only fair in their state of repair. An oral interview conducted by the researcher showed that most of the project vehicles often breakdown during periods of operational activities. Most users of the vehicles are often in a state of seeking other means of repairs/ maintenance because the process of release of funds for maintenance usually follow long overbearing processes and bottleneck that in most cases not approved. It has been reported to be very frustrating and the only options for the users of these vehicles are either repair/ maintain the vehicles from personal income for the vehicles to be operational or wait patiently for funds to be released. The second option usually takes a very long period of time and can eventually result in the vehicle being parked and become dilapidated.

It has also been noted that out of the six power plants owned by the institute, only one of them is in perfect condition for use and the reason for this is inadequate fund for the recurrent expenditure of repair and maintenance. This over bearing pressure on the 27KVA Mikanu Generator Set shown in Plate III has made the institute to allow the generator to run only during the official hours and is made to power only the administrative block. Members of staff are made to rely only on the national grid or fund their sources of power from personal earnings with the use of individually owned generators.



Plate III: A 27KVA Mikano Generator Set used to power the office complex of the National Cereals Research Institute (NCRI), Badeggi

Most electric generators owned by smaller units and department are either in shortage of fuel or broken down. Other major public assets like the Clinic and boreholes are reported to be in good condition but the only challenge confronting the effective utilization of these facilities is erratic power supply outside official hours of 8:00am-5:00pm and in several occasions, the standby generators do not function due to non-availability of fuel. This is contrary to the assertion of Odediran *et al.* (2015) who noted that Organizational assets play pivotal role in actualizing the goals and objectives of an organization through the satisfaction of the physical and emotional needs of the staff. He further noted that the physical needs of members of staff of organizations can be met by providing safe structure, adequate sanitary facilities, a balanced visual environment, appropriate thermal environment, safe working instruments and sufficient shelter space for his work to be effective and to achieve the set mandate of the organization. It is on the basis of the shortfall in terms of efficient facilities to work,

access to electricity, safe working conditions and adequate remuneration that the institute is shutdown as a result of industrial action embarked upon by members of staff of the institute.

The rice processing machines and other similar equipments are reported not to be in perfect condition for use as indicated by a weighted mean score of 2.20 of the respondents who noted that they are in poor condition. This condition is not far from the position of Nchuchuwe and David (2015) who reported that most public properties/ assets are in dire need of maintenance and require update if the organization is to run smoothly. He further noted that for many years, most of these properties/ assets owned by corporate public organizations in Nigeria have deteriorated with regards to quality and function. This is observed in this study where majority of the cereals processing facilities have broken-down and abandoned to rot as shown in Plate IV.



Plate IV: Hajiya Fatima Lolo Rice Processing Unit, National Cereals Research Institute (NCRI), Badeggi

With regards to some of the factors responsible to the present state of these assets/ facilities, findings have shown that corruption, sentiment (nepotism) in the award of

contracts are considered to be some of the reasons for poor management of corporate public assets in the study area and this is in agreement with Olowokudejo *et al.* (2011) who reported that public enterprises whose policies are not hinged on practices of regulatory philosophy to checkmate endemic corruption and bribery normally truncate the main purpose of establishing the organization. Since most stakeholders are involved the corporations' notorious mismanagement of funds, there appears to be no political will to prosecute those involved and this results in outright embezzlement of public funds and connivance with contractors to be paid completely for jobs that are either not done or inadequately implemented. This is in agreement with Otieno *et al.* (2020) who noted that in most public organizations, cases exist where outdated and obsolete equipment and machines are procured with the prices of new ones. It is regrettable to note that this funds that are diverted could have found useful value in the management, maintenance and development of other vital corporate properties in the study area as shown in Plate V where some of these facilities are abandoned due to poor management practices.



Plate V: Dilapidated Rice Processing Machines in the Study Area

The study also showed that another factor responsible to poor management of corporate public assets in the study area is poor funding. This, in combination with hard-to-pass administrative bottlenecks, have resulted in the problems of poor services with regards to maintenance of these properties and irregular and erratic supply of power and water.

The challenge of poor funding as noted in this study is in agreement with the findings of Gado (2015) who reported that the performance of most corporate public organizations in Nigeria are compromised due to over dependence on fiscal allocation from Federation Account for the financing of projects in order to achieve the set mandate of the agency. Depending only on the government as the source of fund has in most cases led to inactivity and unfruitfulness with regards to set mandate. The national economic depression in recent time due to the covid-19 pandemic and the fall in the price of crude oil have left most agencies like the National Cereals Research Institute (NCRI), Badeggi in a state where inadequate funding from federation account has hindered adequate and efficient management of corporate public properties in this study area. In most cases, internally generated funds (IGFs) are either embezzled or sent back to the tertiary single account (TSA) instead of being utilized for the maintenance and management of the core assets/ infrastructure used for the realization of the mandates of the establishment. The return of these funds are all tailored towards curbing corruption and embezzlement in public corporations in Nigeria especially the NCRI and the effect is insufficient funds for the maintenance of these public properties. This is also in agreement with Otieno *et al.* (2020) who reported that insufficient funding of corporate public organization results in operational difficulties and non-achievement of the aim of establishment of the organization.

With regards to management strategy that is adopted in the management of the assets in the study area, the respondents generally disagreed that the organization adopts its assets management policy as shown in Table 4.7. For roofing materials and the office complex, the organization's maintenance standard indicates that there must be monthly inspection of the entire office complex but findings showed that there have never been any observed maintenance except when there is leakage or when affected by storm. It is also regrettable to note that the Institute does not embark on proactive step in terms of prevention of damages to property assets of the organization.

For bends, drainage channels and soak away, the adopted management policy involve periodic check and must be emptied when it is filled. Contrary to this, drainages are always blocked before evacuation is carried out, covers are broken and take long bureaucratic process for approval to be made for repairs. Repairs and maintenance are only done when working tools in the laboratories have worn out and completely ineffective. This is in agreement with Oladokun (2013) who noted that corporate organizations in Nigeria are mostly reactive with regards to corporate property management style. These also include project vehicles which do not receive any form of maintenance except only when there are noticeable problems. This is contrary to the adopted policy of services undertaken based on number of kilometers covered. This non-adherence to the maintenance policy has resulted in constant breakdown of most of the organization's assets/ properties and jeopardizes the set goals of the research institute.

With regards to source of finance for the maintenance of the corporate assets, it is recommended according to the policy that official request should be made, by indicating with proof the observed needs, for fund to be released for maintenance/ repairs of

assets. Findings showed that there is always shortage of Funds from allocations. The policy also recommended that part of the funds generated through Internally Generated Funds (IGFs) could be used to take care of maintenance but contrary to this, the funds are either sent to Single Treasury Account (TSA) or embezzled at local level.

this none compliance with the adopted management policy of corporate assets has made the institute to be constantly encumbered with the burden of replacement of some vital properties that could otherwise be still useful in operations had they been proactive in the management of corporate properties in the organizations. This translates to unnecessary recurrent expenditure when funds are available and in the presence of shortage of funds, as in the case of the National Cereals Research Institute (NCRI), Badeggi, these properties are abandoned as shown in Plate VI and the purposes for which they are procured are truncated and the mandate unachieved.



Plate VI: Abandoned wrecked Tractors in the National Cereal Research Institute, Badeggi.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

If the mandate of the National Cereals Research Institute (NCRI) Badeggi must be achieved, especially in an era where Nigeria is encumbered with the burden of economic crisis, the issue of food security must be given utmost attention. The basic kinds of food of Nigerians are cereals crops of which the Institute is mandated to improve on its production and develop genetic improvement of these crops. NCRI assets/ facilities play pivotal role in actualizing her goals and objectives through the satisfaction of the physical and emotional needs of the staff, providing adequate safe structure, sanitary facilities, balanced visual environment, appropriate thermal environment, safe working instruments and sufficient shelter space for his work and play.

Currently, many facilities and infrastructures in the Institute are performing below specification and many of them have lost their economic value. These corporate assets range from office facilities, buildings, research facilities, central service laboratories, farm implement, source of power supply and roads. Though, there exist administrative departments which incorporate within them maintenance units and Stores, the frequently observed poor state of these assets is an indication of poor maintenance by the institute. The absence of efficient culture of maintenance is partly due to the absence of a clear-cut corporate assets maintenance policy and one of the ways to achieve this is by enshrining adequate maintenance culture and adoption of effective assets management principles with regards to property management of the institute.

Conclusively, adequate maintenance culture can be achieved by engaging the services of public assets managers (either in-sourced or out-sourced) for the management of these assets and they can be held accountable for their operational state. This will help to make public assets management sustainable so that the mandate of the institute can be actualized.

5.2 Recommendations

Based on the findings of this study the following are provided:

- i. Introduction of effective monitoring and evaluation scheme with regards to the assets/ properties of the institute. This scheme is continuously implemented can monitor the performance of these property assets and how it impacts the purpose of its procurement. This will ensure that these properties attain their stipulated life cycle.
- ii. Adequate allocation of fund for their maintenance.
- iii. Good quality of infrastructure. The government and stakeholders must have the political will to insist that the infrastructure delivery of the institute is provided according to specification. This involves engineering, procurement, construction, installation and commissioning.
- iv. Development of technical know-how on how to maintain and manage the procured properties. If the assets of the institute must be in an efficient and working condition, maintenance units must be adequately trained. Some of these infrastructure include healthcare equipment, radio transmission equipment, tractors, processing machines, project vehicles and telecommunication infrastructure. They should be trained and updated on how to repair and overhaul most of the imported facilities so that they will remain useful for the achievement of the set mandate of the institute

- v. Instilling the spirit of patriotism and ownership. Most Nigerians regard public properties as no man's property. This attitude is born out of absence of patriotism and lack of commitment for common national growth and development. For this public properties to be useful and sustained, must be encouraged to adopted nationalistic approach with regards to the properties of the institute.
- vi. Development of legal framework with regards to maintenance. Maintenance requires legal framework about who should be responsible. The suppliers or contractors should be mandated, through contract, to be in charge of the infrastructure assets for minimum of five years.
- vii. Developing the political will to punish members of staff who carelessly misuse public properties. Such people must be identified and assigned suitable penalties for such offences.
- viii. Rewarding committed members of staff with regards to management of these infrastructures.

5.3 Contribution to Knowledge

This study establishes the significance of assessment of corporate property assets of an organization with the case of Nigerian Cereals and Research Institute NCRI, Badeggi, Niger state. This study further established that the state of many facilities and infrastructure in the Institute was below specification and many of them have lost their economic value. The factors established to be the cause of the poor state of facilities area include lack of maintenance policy with Relative Importance Index (RII) of 0.9905, misuse of assets by the users with RII of 0.9333 and Lack of timely response to maintenance work with RII of 0.8286.

By implication, in the absence of effective monitoring and evaluation scheme, making adequate allocation of fund for assets management, training of technical staff on how to maintain and manage procured properties, instilling the spirit of patriotism and ownership among users of these assets and developing of legal framework on assets management, the state of corporate assets will continue to depreciate and it will become difficult for the institute to utilize these assets for the achievement of the goals of the institute

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APPENDIX
QUESTIONNAIRE

Dear Sir/ Madam,

This questionnaire is aimed at collection of data on the Assessment of Corporate Property Assets Management in NCRI, Badegi, Niger state. You are kindly requested to provide information to the best of your knowledge with regards to questions provided. This work is purely for academic purpose and information provided shall be treated with utmost confidentiality.

SECTION A: PERSONAL BIODATA

1. Gender: (a) Male () (b) Female ()
2. For how long (years) have you been employed and working in this organization?
0-2 years (b) 3-5 years, (c) 6-10 years, (d) 10-15 years, (e) 16 years and above
3. Educational Qualification:
(a) WASSCE/SSCE (), (b) OND/ NCE/ Diploma (), (c) Graduate: HND/
B.Sc ()
(d) Professional (e) Postgraduate
4. What is the nature of your job?
(a) Engineer, (b) Administrator, (c) Estate / Project Manager, (d) Skilled worker,
(e) Cleaner/ artisan

SECTION B:

5. What are the types of public assets are in NCRI?
 - a.
 - b.
 - c.
 - d.
 - e.
 - f.
6. How many staff Quarters is in the jurisdiction of NCRI?.....
7. What kinds of facilities are in the staff quarters?
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8. What is the main source of power in this Organisation?
 9. What alternative sources of power do you have?
(a) Solar (), (b) Electric Power Generator (), (c) others: Please specify
 10. How many office Blocks do you have in your Organisation?
 11. What is the state of road network within your organization?
(a) Very good, (b) good, (c) Fair, (d) Bad, (e) Very Bad.
 12. How may you rate the efficiency of the housing and facilities available in your organisation? (a) Very good, (b) good, (c) Fair, (d) Bad, (e) Very Bad.
 13. Since the construction of staff quarters was first done, have there been additional structures erected to cater for staff accommodation? YES or NO
 14. If YES, when was that done?
(a) 5 years ago, (b) 6 to 10 year ago, (c) 11-15 year ago, (d) More than 15 years, (e) None
 15. If facilities breakdown and is in need of immediate repairs, who funds the bill?
(a) Personal account, (b) Staff cooperative, (c) Recurrent Operational budget from Federal allocation, (d) Money realized from rent deductions from staff salaries
 16. Other sources of funds apart from Federal allocation and deductions from rent.
 17. If facilities brake down, is there any channel through which complaint is made to the management?
YES/ NO
 18. If “YES”, through what channel?
.....
 19. How often is routine maintenance undertaken in your organisation?
(a) Quarterly, (b) Yearly, (c) When a case is reported, (d) When fund is available, (e) Hardly done

20. How can you assess responses to complaints made to the appropriate department with regards to maintenance of facilities in your organisation (a) Efficient, (b) Average, (c) Poor, (d) Very poor.
21. Whose responsibility is it to take care of maintenance of the corporate property assets in your organisation?
22. Is there any Department assigned to monitor and report cases of facilities in need of repairs? YES or NO
23. If “YES”, What is the name of the Department

24. Who is directly responsible for repairs and maintenance of these facilities?
 (a) Works Department, (b) Contractors, (c) supervisory agency (d) Users of the properties
25. What facility principles are used as measures to prevent the misuse of corporate public assets in your organisation?
 (a) Taking quarterly inventory of facilities in staff quarters/ offices, (b) making users responsible for proper management of facilities under their care, (c) assigning penalty to abuse and careless use of facilities, (d) making users pay for the repair of mishandled facilities on their care
26. How many trained professionals in the field of property management (Estate Managers, Electrical/ Electronics Engineers, e.t.c) are engaged in the facility management in your organisation?

27. Corruption is one of the factors hindering the effective management of corporate property assets in your organisation. (a) Strongly Agree (), (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()
28. The reason why corporate property assets are not managed efficiently is because the use of sentiments (nepotism) in the award of contracts(a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()
29. Corporate property assets are not properly managed due to poor funding. (a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()
30. Lack of facility specialized personnel in the Units/ Department responsible for facility management is the cause of poor state of corporate public assets in your

organisation. (a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()

31. The reason for poor state of corporate assets in your organisation is the lack of political will to prosecute corrupt stakeholders in the management of public assets. (a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()

32. Theft / Inadequate security system is one of the reasons for the poor state of public assets in your organisation? (a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()

33. Administrative bottleneck is the leading cause of inefficient management of corporate property assets in your organisation? (a) Strongly Agree () (b) Agree () (c) Undecided () (d) Disagree () (e) Strongly Disagree ()

34. What recommendations do you think is necessary for effective/ efficient management of corporate assets in your organisation?

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