Analytical Study of Facilities Management Practice in Selected Housing Estates in Rivers State

Omorodion Joseph¹, Nwachukwu Chinedu Chidinma², Nwosu Chiemezie Chisom³
Department of Estate Management
Nnamdi Azikiwe University, Awka Anambra State, Nigeria

Abstract:
Facilities Management (FM) is becoming an increasing important factor in the built environment. To address the problem of adequate housing provision for the growing population in Rivers State necessitated the involvement of both public and private sectors in the development of housing estates. However, regardless of the nature and ownership status of these estates, they need to be properly managed; hence the integration of facilities management into their management. This study analyses Facilities Management practice in selected housing estates in Rivers State, Nigeria. The objective of the study is to determine the extent which FM practice affects service delivery in the housing estates. The study adopts a field survey using primary sources of data namely; structured questionnaires, personal interviews and observations. The sample size was determined using the Taro Yamane’s formula. The sample size for this study is 278. The stratified sampling technique was used to select the sample from the two selected areas in Rivers State and questionnaires were employed to extract the necessary information. The data collected was subjected to descriptive statistical analysis method. Analysis was done using the statistical package of social sciences version 23. The study revealed that majority of residents in the housing estates were dissatisfied with the FM services. It was recommended that Facilities management team should constantly relate with the residents in order to understand the facilities that need prompt attention in terms of repairs or replacement.

Key words: Facilities Management, Housing Estates, Service Delivery.

I. INTRODUCTION

FM according to Dells (2008), involves the creation of an environment that is conducive to carrying out an organization’s primary operations, taking an integrated view of the services and infrastructure, and using same to deliver customer satisfaction and value for money through support for and enhancement of the core business. Little wonder it is defined as the co-ordination of the physical work place, work and the people, in order to enhance service delivery and in and in turn create an enabling work environment for optimum output (Opaluwah, 2005). In this essence therefore, the practice of FM aims to achieve but not limited to the following:

i. Asset re-evaluation – making them highly cost effective at any given time.
ii. Enhancing organization’s culture and image.
iii. Deliver efficient/effective services
iv. Enable future change of space use.
v. Placing the organization’s position strategically in the industry of operation which gives it competitive advantage.

The practice of FM is concerned with the process by which organizations ensure that the buildings, systems and services support core operations while contributing to the achievement of their strategic objectives under stable business conditions (Bagshaw et al., 2015). It focuses on matching limited resources with user needs with a view to securing higher quality, lower risks and value for money (Cotts, 1999). Specifically, it deals with space design, construction, allocation, strategy, property asset management, maintenance and post occupancy evaluation of premises, inventory management, value management and life cycle costing, computerization and office automation, management of support services, and so on (Achoru, 2015). Recent global economic development and greater awareness of facilities management has led to its wider application in virtually every sector of the Nigerian economy. This can be attributed to the activities of some indigenous and mostly multi-national organizations in Nigeria; particularly those in the petroleum, hospitality and insurance industries including Mobil, Chevron, National Insurance Corporation of Nigeria (NICON) and Eleganza. Organizations with financial and human resources constraints have had to closely manage their day-to-day requirements and their resources to plan and develop their facility programmes, based on long-term goals, political realities and economic necessities. Similarly, those organizations with less restrictive economic or physical requirements that had traditionally spent minimal time on long-term facility issues, and others which have hitherto practiced property management are now embracing the practice of FM (Oladokun, 2012). The need to provide excellent working and living environments has made these organizations embrace the tenets of FM. Notwithstanding FM practice in the corporate real estate sector from the examples given above, FM is observed to be visible in the housing management sector in Nigeria. Information obtained from housing estates brochures in Rivers State showed that FM has become a selling point for housing estates by placing emphasis on infrastructure provisions and FM. This positive trend started in the 1990’s with Aggrey Estate, followed by Golden Valley Estate and Golf Housing Estate all of which are located in Port Harcourt in Rivers State. Every facility or property needs to be effectively and efficiently managed as there is a significant
The relationship between property management and investment performance (Wong, 1996). Zailan (2001) opined that in the events of economic and financial crisis, effective FM would improve facility performance through quality improvement and control cost. Zailan (op sit) concluded that effective FM delivers quality service to its end-users. Large housing estates need to have proper facilities management in place to maintain them. Mclenan (2004) opined that lack of facilities management frame work is the reason why housing facilities are in deplorable state. The deplorable state of some public housing estates in Rivers State arising from inadequate and poor management lends credence to Mclenan opinion. Olusegun (2015), opined that strategic and operational management problems plague the practice of facilities management in the management of housing facilities which manifest themselves in the form of dilapidated buildings/facilities, poor sanitation and adverse environmental condition. A remarkable feature of some housing estates in Rivers State is the slow pace and sometimes neglect of the replacement/refurbishment of obsolete facilities. The need for this study is borne out of the fact that most of the facilities especially in the public housing estates in Rivers State are deteriorating and as a result the housing estates have lost their value. In the light of the above, this study seeks to examine the facilities management practice in the selected housing estates in the study area with a view of integrating facilities management practice for effective service delivery. The objective of the study is to determine the extent which facilities management practice affects service delivery in the selected housing estates in Rivers State. This study is restricted to facilities management practice in relation to ten selected public and private housing estates in Obio-Akpor and Eleme in Rivers State. The study will focus on FM services, stakeholders and problems pertaining to the housing estates.

II. LITERATURE REVIEW

The Meaning of Facility
‘Facility’ has been variously described as a physical structure or installation, including related site works, serving one or more main purposes (International Organization for Standardization – ISO, 1994); The constructed environment, examples are buildings, structures, infrastructure, plant and equipment (Kaiser, 1995; Dictionary of Construction, 2014); Something that is built, installed or established to serve a purpose (Cambridge English Dictionary & Thesaurus, 2012); or an installation (Roget’s Thesaurus, 2014; Merriam-Webster Dictionary, 2015). Another description of facility is that it could be a permanent, semi-permanent, or temporary commercial or industrial property (Business Dictionary, 2015). From these definitions, it could be inferred that facility is the totality of the built environment including its infrastructures and services. According to Oladejo (2009), ‘facility’ can be seen from an organization’s point of view as any useful, tangible asset. The management of these assets is the focus of facilities management. Oladejo (op cit) went further to state that ‘facilities’ in relation to real estate consist of those equipment that enhance the utility, enjoyment, safety and convenience of the occupant. Describing the importance of ‘facilities’ from FM perspective, Alexander (2003) argued that they provide the base for business, and play a role in attracting inward investment. The major considerations with regards to facilities are the ability to adapt to changing business needs and new technologies vis-à-vis the need to provide a healthy workplace for employees, and the judicious utilization of scarce resources to maximum effect. In this regard, it could be inferred that the essential functions of facilities are for comfort, enjoyment and protection of the end-users as well as ensuring that the facilities economic useful life is achieved. Davis & Nestrom (1985) opined that poor decisions about facilities can prevent an organization from achieving its basic objectives.

Meaning of Facilities Management
Facilities Management (FM), according to the International Facility Management Association (IFMA, 2006) is “a profession that encompasses multiple disciplines to ensure the functionality of the built environment by integrating people, place, process and technology”. Tay and Ooi (2001) emphasize that facilities management is increasingly recognized as an element of the value chain of a business through which an organization provides and maintain the quality of the work environment for its human resources and materials. The role also contributes to the achievement of the cooperative goals through enhancement of the core business of the organization. The facilities manager’s core role includes maintaining, improving and adapting the buildings and other infrastructure of an organization in order to create an environment that strongly supports the primary objectives of the organization (Strategic Facilities Management Section, 2006). Alexander (2003) found that the role of facilities management has evolved from merely helping organization to survive to include enhancement of its potential to prosper in a volatile commercial climate. APPA (2013) affirm this view by stating that the positive evolution of facilities management role leads to increasing shift in emphasis from operational to a more strategic role of business process enhancement, which includes the escalation of competitive advantage and eventually the achievement of corporate goals and objectives.

Other definitions of ‘facilities management’ which reveal the nature of the field or profession are summarized as follows:

• Becker (1990): FM is responsible for coordinating all efforts related to planning, designing and managing buildings and their systems, equipment and furniture to enhance the organization’s ability to compete successfully in a rapidly changing world.

• Park (1998): Facilities management involves the structuring of building, plant and contents to enhance the creation of the end product. As with all systems, it is the generated benefits to the business or activity that matters, not the system itself.

• Grinshaw and Cairns (2000): Facilities management addresses the challenge of radical movement in demand size organizational structures which drive fundamental change in the relationship between business performance and effective application of infrastructure resources.

• Varcoe (2000): FM focuses on the management and delivery of two entities (Real estate and Construction industry), to ensure the provision and use of productive building assets and working place.

• Building Owners and Managers Institute, (2002): FM is the process of coordinating the physical workplace with the people
and work of the organization. The primary function of FM is to plan, establish and maintain a work environment that effectively supports the goals and objectives of the organization.

• **Barret and Baldry (2003):** FM is an integrated approach to maintaining, improving and adapting the buildings of an organization in order to create an environment that strongly supports the primary objectives of that organization.

• **IFMA (2003):** Facilities management goal is to create, maintain and develop real estate and support services for the strategic and core business of the organization.

• **Then (2003):** Practical facilities management is concerned with the delivery of enabling work environment and space to function optimally and to support business processes and human capital development.

• **IFMA (2005):** Facilities management is a profession that includes the integration of activities from different discipline to ensure functionality of the environment with the integration of people, processes and technology.

• **IFMA (2010):** FM is a profession that encompasses multiple disciplines to ensure functionality in the built environment by integrating people, place, process and technology. With the extensiveness of facilities management definitions and functions, Atkins and brooks (2005) argued that in the pursuit of sustaining and achieving the business objectives, an organisation should holistically emphasize on the strategic potentials of facilities management as an integrative and interdependent discipline that aim to accomplish the following aspects: support people in their work and activities; enhance the individual well-being enable the organization to deliver effective and responsive services; allow for the future change in use of space; provide competitive advantage to the organization’s core business and enhance the organization’s culture and image. Kelly et al., (2002) argued that facilities management could mean different thing to different parties, and the scope of services could vary between organizations or departments. Lindholm (2008) further argued that the definition and scope of facilities management still remain debatable until now due to the fact that the nature or characteristics of the organization strongly reflect its business objectives, organizational process and organizational culture. Giving the several definitions of the nature and role of facilities management, it is insufficient to formulate one holistic definition, which will capture the true essence and scope of facilities management functions. However, the above provides some holistic insight into the wide spectrum of facilities management role upon which this study and the findings will be anchored.

### Elements of Facilities Management

Facilities encapsulate a system composed of buildings, infrastructure and support services. This system is the inter-link or the web that binds people and place together, and turns them into a production system. In the IFMA model (figure 2.1), FM serves to coordinate the interface between what people do and where they do it, and touches on elements of human resources, process engineering, estate management, ergonomics, architecture and interior design. The interlocking circles represent the important roles which FM plays in integrating an organization processes into a coherent holistic system, details of which can further be explained under the following subheads:

#### People:
These are the personnel and this includes topmost management cadre down to the least worker. It also includes other users such as the business’s customers and visitors. FM needs to provide a safe, pleasant and efficient environment for not only the users of the space managed, but also the community at large.

#### Place:
Place refers to not only the building or facility in question, but the business environment in general, whether built or virtual. It means in effect that the building or facility, and the way it is run impacts on surrounding buildings and the environment. The Facilities Manager, with place as the central focus of his or her field of concerns, has two key roles. The first involves optimum deployment of the organization’s capital resources especially property, physical plant and facilities. The second involves managing the organization’s support services, both routinely and in emergencies.

#### Process:
Cambridge English Dictionary & Thesaurus (2012) defined process “as a series of actions that you take in order to achieve a result”. It is a particular course of action intended to achieve a result.

#### Technology:
This recognizes the importance of technology as an enabler not just improving FM processes but in supporting the business and improving productivity.

### Facilities Management Services in Residential Buildings

Wong (1999) considered FM as the work carried out to manage and maintain the facility including its functional parts at the level that will retain or enhance the value of the facility; create safe, functional and conducive living environment for occupants; keep or restore every part in efficient working order and in good state of repair and project a good appearance of image for the facility. Furthermore, in a study on the operational property management process in large non-property organization in Malaysia, Ismail (1996) regarded FM responsibility to include all the necessary reporting, accounting, maintenance and decision making to ensure the economic and physical vitabilities
of property assets. As opined by Ismail (1996) and Wong (1999), the core of FM may thus involve the management of the physical asset, which includes maintenance; organizational use management which includes space management or user requirements; and financial management which includes property valuation, acquisition and disposal, property investment management and tenancy management. FM services (conventional or unconventional) are multifarious and have variously been described by researchers as encompassing:

- Projecting a building’s identity and image
- Maintenance planning (equipment, etc.)
- Record keeping (legal requirements, monitoring etc.)
- Reducing operational impacts and life cycle costs and
- Responding to complaints and suggestion (Wong, 1999).

Asset Management

1. Contract and contractor management
2. Energy and water management

Facility Management Association of Australia (2012) FM guide for multi – Unit residential buildings

- Waste management
- Stakeholder engagement
- Undertaking larger capital or maintenance projects
- Tracking and recording energy and water consumption
- Space management
- Risk management
- Essential services provision
- Maintaining security for property occupants and assets
- Improving building performances and
- Gardening and ground maintenance

Problems of Housing Management in Nigeria

According to Boleat (1985), the problem of housing is more than physical shelter. Ukoha and Beamish (1997) stated that “…Simply providing housing units does not measure the success of housing programmes in either developed and developing countries. The suitability of the living environment to the needs of the residents is essential for housing programmes to be judged successful”. Loo (1991), indicated that the size and type of the houses being managed may range from one unit of accommodation to a large housing estate that may comprise hundreds or thousands housing units. Both forms have management implications. Oshadiya (1997) indicated that the types of property ownership have their management strategies and operational procedures. For example, legal complexity in property ownership hinders the will to maintain it. Where a particular owner dies intestate, it exposes the housing estate to legal complexity, challenges and great costs to maintain it. Such housing estate suffers neglect and deteriorates in the process. As a developing country, Nigeria is faced with the challenge of providing adequate infrastructure. Utilities such as electricity and water are not reliable where available, and roads, and other transport networks are very poorly maintained. Waste management is also a big challenge, with waste disposal in many cases being managed by individuals through the use of septic tanks and drainage systems. Estates therefore have to not just provide these infrastructures but also maintain their upkeep (in most cases) separately from the

Inefficient or non-existent national grid. Infrastructure and utility services that form essential part of a housing estate usually includes: electric power generator, water borehole, overhead water tank or underground water reservoir complemented with water pump, central air-conditioning system, firefighting equipment and close-circuit cameras, among others. Recreational facilities such as swimming pool and lawn tennis courts are usually provided as standard in the upper- and middle-income housing estates. Besides the inadequacies of the infrastructure and the erratic provision of utility services, the most neglected component aspect of housing estates in Nigeria relates to the building structure, fabric and fittings. Poor maintenance has led to a very poor aesthetic quality of the housing stock. Often times, lifts breakdown or become defective and require repairs or replacement, which are not affected on time thereby subjecting residents to undue hardships and unnecessary risks. This could have been avoided if appropriate remedial action was carried out immediately the fault was identified. The inadequacies of legislation to deal with such health and safety hazards also constitute a challenge to housing management. Other contributory factors which create challenges for housing management in Nigeria identified by other studies(Kehinde, F. 2010; Uwejeya, D. 2012; Ezeigwe P. 2015 and Okafor, B.N. 2016) are:

1. Lack of infrastructure

Basic facilities such as good road network, water supply, electricity, drainage systems are still lacking in many areas in Nigeria. These are infrastructure that if improved on and installed where they are lacking will greatly ameliorate the living condition of the people and bring about better housing situation.

2. Human factor

Resident behavior or attitudes often constitute management problems to the facilities manager. These include incidences of willful damage to properties, the occupancy ratio and intensity of use, physical alteration by residents without prior consent of owners/managers.

3. High cost of building materials

The high cost of building materials and how it affects property development cannot be overstated. Most building materials are imported leading to high cost. The more expensive the materials, the harder it is for low-income earners to purchase them. This translates to income structure, substandard houses and high cost of rent which are all contributing factors to the housing management problems faced in Nigeria.

4. Rural-urban migration/ urbanization

This is the movement of people from rural areas to urban centers causing population explosion in such urban areas. With this, greater pressure is exerted on infrastructure and facilities which are disproportionate to the population using them. Rivers State has been a major recipient of rural – urban migrants.

5. Poor Quality houses

This can be easily traced to high cost of building materials, inadequacy to satisfy the increasing demand for houses, lack of maintenance management and a host of other reasons. The result of all these are the poor quality houses observable around the country.
6. Obsolescence
Apart from the numerous management problems earlier discussed, most housing estates, especially the public ones are subject to untimely physical, economic, functional and social obsolescence.

7. Inadequate implementation of planning policies
Institutions charged with the development plans in Nigeria are falling short in many ways. Even where these plans exist as regards housing, they are too focused on urban development while the rural areas are neglected. Generally, there is a lack in rural and urban development plans as well as great implementation deficiency which is a major cause of housing problem in Nigeria.

8. Climatic condition
This could have varying effects on virtually all elements or parts of the building, be it the substructure (i.e. foundation), super-structure, and the roof. Its effects can lead to problems in the areas of metal corrosion, dampness and mildew, plaster works, joinery, paintworks, condensation kitchen and mosses, etc. It poses a serious problem particularly when construction materials are selected without due consideration to the prevailing weather and climate. For instance, most of the housing estates in Rivers State that are very close to the seashore are experiencing heavy corrosion of exposed parts of the building elements as a result of the heavy presence of salty sea vapour.

III. METHODOLOGY
The field survey design is considered appropriate for this study because it is amenable to situations where facts or data must be collected from respondents scattered in different locations, and data collected from a sample of the target population will be used to predict certain characteristic of the population. The population of the study is made up of the total number of housing units of the 10 selected housing estates in the study area which is 917.

The sample size of this study was determined using Taro Yamane’s formulae:
\[
n = \frac{N}{1 + N (e)^2}
\]
Where,
\[
n = \text{the sample size}
\]
\[
N = \text{Total population}
\]
\[
e = \text{Level of significance}
\]
\[
1 = \text{Unity (a constant)}
\]
Therefore, given that \(N= 917\) (as stated above) \(e=\) is assume to be 5% then the sample size is calculated thus,
\[
n = \frac{917}{1 + 917 (0.05)^2}
\]
\[
n = 278
\]
The optimum sample size of the study is 278.

IV. RESULTS
Effectiveness of Facilities Management Team’s Service Delivering in the Housing Estates
This examines the adequacy and appropriateness of services that were being provided from the Facilities Managers’ point of view. In this regard they were asked to do a self-assessment of the services being rendered by them (Table 4.1) on a 5-points Likert-type scales ranging from (5) = Very Effective (VE) to (1) = Not Effective (NF). In the same vein, residents receiving these services were asked the same set of questions (Table 4.2) after which these views were respectively analyzed, there after these different views were respectively compared in other to discover areas of commonality and/or divergences.

<table>
<thead>
<tr>
<th>FM Services provided</th>
<th>No of Respondents</th>
<th>Mean</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security services</td>
<td>9</td>
<td>4.5658</td>
<td>1</td>
</tr>
<tr>
<td>Routine inspection and maintenance of facilities</td>
<td>9</td>
<td>4.5641</td>
<td>2</td>
</tr>
<tr>
<td>Help desk and janitorial services</td>
<td>9</td>
<td>4.5611</td>
<td>3</td>
</tr>
<tr>
<td>Environmental management</td>
<td>9</td>
<td>4.5329</td>
<td>4</td>
</tr>
<tr>
<td>Access roads maintenance</td>
<td>9</td>
<td>4.4321</td>
<td>5</td>
</tr>
<tr>
<td>Solid waste disposal</td>
<td>9</td>
<td>4.4310</td>
<td>6</td>
</tr>
<tr>
<td>Drainage system survey and maintenance</td>
<td>9</td>
<td>4.4311</td>
<td>7</td>
</tr>
<tr>
<td>Report and records management</td>
<td>9</td>
<td>4.4219</td>
<td>8</td>
</tr>
<tr>
<td>Contract administration and maintenance of work supervision</td>
<td>8</td>
<td>4.4120</td>
<td>9</td>
</tr>
<tr>
<td>Routine inspection and maintenance of buildings</td>
<td>9</td>
<td>4.3899</td>
<td>10</td>
</tr>
<tr>
<td>Building performance evaluation</td>
<td>9</td>
<td>4.3375</td>
<td>11</td>
</tr>
<tr>
<td>External building Maintenance</td>
<td>9</td>
<td>4.3242</td>
<td>12</td>
</tr>
<tr>
<td>Regular maintenance of electrical and mechanical equipment</td>
<td>8</td>
<td>4.2382</td>
<td>13</td>
</tr>
<tr>
<td>Help desk and janitorial services</td>
<td>9</td>
<td>4.2291</td>
<td>14</td>
</tr>
<tr>
<td>Asset tracking, inventories and the periodic evaluation of the state of facilities generally</td>
<td>9</td>
<td>4.2214</td>
<td>15</td>
</tr>
<tr>
<td>Utility operation and maintenance</td>
<td>9</td>
<td>4.2117</td>
<td>16</td>
</tr>
</tbody>
</table>
The above Table 4.1 indicates that security was rated most 'effective' service, having an average mean of 4.5610, while internal building maintenance function, with an average mean of 2.1000 was considered the 'least effective'. Reasons given were that due to the prevailing security challenges prevailing in the country, security is regarded as very 'tight'. The least attention is paid to internal building maintenance as residents is required to maintain the internal space of their respective housing units while the FM team only concern itself with the external part and building structures.

Table 4.2. Residents Satisfaction with the Performance of the FM team

<table>
<thead>
<tr>
<th>FM services provided</th>
<th>Number of respondents</th>
<th>Mean</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>General security</td>
<td>226</td>
<td>4.6411</td>
<td>1</td>
</tr>
<tr>
<td>Cleaning of common parts</td>
<td>225</td>
<td>4.5914</td>
<td>2</td>
</tr>
<tr>
<td>Waste collection/disposal services</td>
<td>227</td>
<td>4.4776</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Sanitation services</td>
<td>224</td>
<td>4.3623</td>
<td>4</td>
</tr>
<tr>
<td>Water supply/borehole maintenance services</td>
<td>225</td>
<td>4.3532</td>
<td>5</td>
</tr>
<tr>
<td>Estate roads and drainage maintenance</td>
<td>227</td>
<td>3.9991</td>
<td>6</td>
</tr>
<tr>
<td>House/building maintenance services</td>
<td>222</td>
<td>3.9899</td>
<td>7</td>
</tr>
<tr>
<td>Building maintenance and surrounding</td>
<td>211</td>
<td>3.7721</td>
<td>8</td>
</tr>
<tr>
<td>Level of nuisance from staff/miscrants</td>
<td>226</td>
<td>3.7612</td>
<td>9</td>
</tr>
<tr>
<td>Environmental management services</td>
<td>224</td>
<td>3.5914</td>
<td>10</td>
</tr>
<tr>
<td>Landscaping and ground services</td>
<td>227</td>
<td>3.5216</td>
<td>11</td>
</tr>
<tr>
<td>Help desk</td>
<td>211</td>
<td>3.2922</td>
<td>12</td>
</tr>
<tr>
<td>Porterage/janitorial services</td>
<td>218</td>
<td>3.1114</td>
<td>13</td>
</tr>
<tr>
<td>Graffiti removal and prevention</td>
<td>226</td>
<td>2.4976</td>
<td>14</td>
</tr>
<tr>
<td>Quality of FM services being rendered</td>
<td>227</td>
<td>2.4841</td>
<td>15</td>
</tr>
<tr>
<td>Lease management services</td>
<td>209</td>
<td>2.4621</td>
<td>16</td>
</tr>
<tr>
<td>Installation of security gadgets</td>
<td>227</td>
<td>2.4599</td>
<td>17</td>
</tr>
<tr>
<td>Procedures for reporting and getting work done</td>
<td>226</td>
<td>2.4432</td>
<td>18</td>
</tr>
<tr>
<td>Health and safety support services</td>
<td>227</td>
<td>2.2322</td>
<td>19</td>
</tr>
<tr>
<td>Fire prevention &amp; safety</td>
<td>217</td>
<td>2.2147</td>
<td>20</td>
</tr>
<tr>
<td>Streetlights and maintenance</td>
<td>226</td>
<td>2.2134</td>
<td>21</td>
</tr>
<tr>
<td>Fumigation services (pest control)</td>
<td>224</td>
<td>2.2119</td>
<td>22</td>
</tr>
<tr>
<td>Bus shuttle services</td>
<td>222</td>
<td>2.2112</td>
<td>23</td>
</tr>
<tr>
<td>Stand by electric generator maintenance</td>
<td>227</td>
<td>2.1111</td>
<td>24</td>
</tr>
<tr>
<td>Medical facilities (hospitals, clinics,)</td>
<td>224</td>
<td>2.1993</td>
<td>25</td>
</tr>
<tr>
<td>Septic tank/cesspool dislodgment services</td>
<td>221</td>
<td>1.9923</td>
<td>26</td>
</tr>
<tr>
<td>Creche center management</td>
<td>233</td>
<td>1.9741</td>
<td>27</td>
</tr>
<tr>
<td>Laundry services</td>
<td>221</td>
<td>1.8217</td>
<td>28</td>
</tr>
<tr>
<td>Mailroom/courier services</td>
<td>213</td>
<td>1.4218</td>
<td>29</td>
</tr>
<tr>
<td>Laundry services</td>
<td>226</td>
<td>1.3121</td>
<td>30</td>
</tr>
<tr>
<td>First aid boxes</td>
<td>227</td>
<td>1.2912</td>
<td>31</td>
</tr>
<tr>
<td>Water treatment services</td>
<td>226</td>
<td>1.2511</td>
<td>32</td>
</tr>
<tr>
<td>Catering and hospitality services</td>
<td>224</td>
<td>1.2211</td>
<td>33</td>
</tr>
<tr>
<td>Housekeeping services</td>
<td>222</td>
<td>1.1116</td>
<td>34</td>
</tr>
</tbody>
</table>
Table 4.2 examines residents’ perception on their level of ‘satisfaction’ with the FM teams and the services rendered by them. Here we can see that resident, similar to FM team perspective, were most satisfied with ‘security services. Other services ranked high by the residents are:

i. Cleaning of Common parts and other cleaning services
ii. Waste/refuse collection/disposal services
iii. Water supply and Borehole maintenance services
iv. Environmental sanitation service

Close examination of the Table 4.1 and Table 4.2 revealed disparities of opinions of the Facilities Managers and residents concerning the effectiveness of FM services delivery. While the Facilities Managers scored themselves high in all the services they rendered, the residents had different opinions in certain areas as shown in Table 4.2. It is noteworthy that there were instances the residents scored the FM teams high as shown in Table 4.2.

Furthermore to have a clue about the residents’ respondents ratings in all the given dimensions of facilities management teams’ service delivery, two options (very effective and effective) were summed up into a single option to reflect the positive responses using the ‘Re-code into different variable’ function in the SPSS. Equally the same was applied to the other two options (fairly effective and not effective), to reflect the negative responses. The data obtained in each item were summed up to form a single category measuring facilities management teams’ service delivery, using the ‘Compute variables’ function in SPSS. The data analysed using this summed data is shown in figure 4.1.

**Figure 4.1. Resident respondents’ general views on the effectiveness of facilities management team’s service delivery in the Housing Estates.**

Data contained in figure 4.2 shows that the percentage of the residents’ respondents who considered the facilities management team as ‘fairly/not effective was higher than those who considered them as being ‘very effective/effective’ given the summed-up data measuring the effectiveness of facilities management team’s service delivery in the housing estates.

**V. CONCLUSION AND RECOMMENDATION**

This study was motivated by the need to examine facilities management practice in housing estates at Obio-akpor and Eleme, considering the fact that a number of studies have decried the pitiable conditions of facilities within different housing estates in Port Harcourt city. Facilities management team was considered important to the provision of needed services within the housing estates. Thus, to assess their service delivery through the views of the residents who are the end users of the facilities was considered paramount. Having analysed different aspects of data obtained from the field, the researcher concludes that a majority of the residents considered the FM teams ineffective on various dimensions of service delivery measured. It was recommended that Facilities management team should constantly relate with the residents in order to understand the facilities that need prompt attention in terms of repairs or replacement. This would help to ensure that the facilities within the housing estates are managed effectively without becoming dilapidated before maintenance works are carried out.

**VI. REFERENCES**


