

Facilities Management of Sports Infrastructure in Tanzania: A Case Study of the Stadia in Dar es Salaam

Peris Gerald Leguna and Charles Lucian
Ardhi University
Email: perisleguna@gmail.com / charleslucian@gmail.com

Purpose: The growth of sports industry comes with increased infrastructures which required reliable management for their sustainability. The research aimed at exploring the management of sports infrastructure with special reference to stadia. It assessed the management practice, explored the policies supporting the management of the sports facilities and associated challenges towards suitable management practice in the sports infrastructure in Tanzania.

Design/Methodology: The study involved a qualitative research approach with alignment to the case study method. Purposive sampling was used to obtain respondents whereas interview guide and observation were adopted as data collection tools. This paved way for thematic analysis with the help of methods for data presentation.

Findings: The research revealed the difference in facilities management practice of stadia facilities and other properties due to peculiarity of installed facilities and the use of the infrastructure. Also, the facilities management was not addressed by the sports development policy; consequently, there were no facility managers which lead to inadequate maintenance plan and threaten sustainability of infrastructure.

Research Implications/Limitations: The paper creates a compound eye to researchers on the management of sports infrastructure. The major limitation of the paper was lack of one-to-many relationship (user versus stadia) which has narrowed the probability of one user having visited both stadia.

Practical implications: The research guides facilities managers on the stadia management roles and various management aspects for a successful management of the sports infrastructure.

Originality/Value of work: The paper makes an original contribution to stadia management practice in association with challenges and policies involved in the process.

Keywords: Stadia; Management; Sports infrastructure; Facilities

1. INTRODUCTION

Sports infrastructure is an investment that utilizes large amount of funds and among the valuable national assets that reflects an investment image. Thus, requires high management attention which deems crucial for the purpose of development. The investors (public or private investors) have large expectations to yield high returns from the sports investment with least considerations on the afterlife of the sports infrastructure. Hence management becomes the epitome to enhance the high yield of the investment in the sports infrastructure and the importance of stadium management has been raised in most countries

(Megheirkouni, 2017). This can be reflected in the beginning of the twenty first (21st) century where the supply of sports facilities that build up the sports infrastructure increased due to the increase in demand for leisure services (Dugalic & Krsteska, 2013) which in turn expanded to create large investments in the world. Since then, sports infrastructure is an investment that is viewed in a global essence to yield massive profit in both developed and developing countries, hence the focus changed from getting the local community involved in sports, but was instead aimed at attracting tourists, encouraging inward investment and changing the image of the city (Barghachi, et al., 2009).

Sports infrastructure plays an important role in the economy, thus in the case of industrialized countries sport has developed into its own economic branch contributing about two percent to gross domestic product (GDP) (Chappelet, 2015), (Luiz & Fadal, 2011), (Swinnen & Vandemoortele, 2008) and due to the benefits accrued, most investors globally tend to gain interest in sports and one of the factors that attracts investing in the sports economy is a well-managed sports infrastructure. The hub between Sports infrastructure and Facilities Management is incubated in the integration of people, place, process and technology with a consensus of ensuring the functionality of the sports built environment (International Facility Management Association, 2009), whereas the sports built environment is made up of facilities including; a large multi-use center with playing surfaces catering for different sports activities, a small hall or room catering for one specific sport activity usually referred as indoor and support structures such as office buildings and store rooms used specifically for sports purpose. Multiple disciplines are incorporated in enhancing facilities management in sports infrastructure which encompass fields of value engineering for creating benefits and value for money during the utilization of the sports infrastructure, quality management, space management, maintenance, construction management, emergency preparedness in case of dangerous occasions such as fire and other relevant categories.

In the facet of people, lies consolidation of sports and facilities management for maximizing the users' utility and satisfaction in the essence of aesthetics and functionality. Currently the modern sports facilities such as stadia gather the highest numbers of sports audience which is why these facilities get proportionally more attention in management practice (Dugalic & Krsteska, 2013). In context, people are the final users of the sports services and hence safety and an attractive view is important. An example of the harm caused to users due to unsatisfactory condition of the sports facilities is whereby *Liverpool and Juventus team were facing each other in the European Cup final at Heysel Stadium in Belgium, before the match started; Liverpool supporters reacted to taunts from the Italian fans by charging through the lines of Belgian police. The Juventus fans could do nothing, but retreat as far as a wall, which collapsed under the pressure and onto their own fans below. In the ensuing panic 39 supporters died and over 600 were injured* (Eric, et al., 2009).

The facet of place encompasses the physical environment, areas constructed and support structures that enable people to interact and participate in the sports activities (Australian Sports Commission, 2009) hence paves way for facilities management that functions to maintain the sports facilities such as courts (main and secondary courts), playgrounds, change rooms, stairways, ventilation system, lightning, indoor facility. The physical environment of the stadia has encountered evolution in response to the culture of a particular country whereas (John, Sheard, & Vickery, 2013) suggest that stadia can be highly symbolic, reflecting the mindset of the times and the culture of the team, city or event with which they are

associated hence need to be well maintained to ensure the functionality of the place and this requires effective management strategies to be integrated.

Sport facility operations seek to maintain and care for public, private, and non-profit facilities used for sport, recreation, and leisure to ensure safe and secure production and distribution of products and services to users and ensure their satisfaction and utility (Eric, et al., 2009). The operations are either under the government or the sports authorities which have no interference from the government and have more resources to enhance the management activities (Megheirkouni, 2017). The manager responsible for the operations has a duty to oversee other members of the management team including marketing, facility planning, customer service, maintenance services, operations, and sales (Schwarz, et al., 2015). The dimension of technology as applied in sports facilities management is used in enhancing value of facilities and acts as a surface for smooth operations or processes that account for a smooth interaction of people and place. Currently technology is continuously used in development of the sports infrastructure and hence a modified facilities management technology becomes more essential for effective and conducive built environment. Computing power has had, and continues to have, a profound effect on the visualization and realization of both traditional and new forms of construction, including forms of sports facilities construction (Peter & John, 2009).

In summary, sports infrastructure is one of the crucial areas in development of a nation. Sport today, in all of its sectors, represents a result of state's investment into sports infrastructure, above all into facilities for training and competition (Sretenka & Ana, 2013). Hence it is a nation's investment that require more management attention. In the context of global standards of sports infrastructure, Tanzania has invested in Benjamin Mkapa stadium about 56.4 billion dollars equivalent to 130,489,192,634.68 Tanzanian shillings which was built in accordance to FIFA and Olympic standards. This investment has commenced since 2007 to date thus summing to a maximum of thirteen years. Other stadiums including Uhuru stadium and Azam complex (Chamazi) stadium were built with high construction costs.

Globally the condition of sports infrastructure in most of the countries especially developing countries is poor and unsatisfactory (Sretenka & Ana, 2013), this is also reflected in Tanzania where there is a poor condition of the sports infrastructure (Kakonge, 2016). This leads to depreciation of the income generated from the sector (Andanje & Stephen, 2013) as it will render less attraction to investors in the sports facilities. Also, literature emphasize that the poor condition of the sports facilities is prone to accidents that may cause harm to the users of the sports infrastructure.

Sports infrastructures are in a parlous state due to poor management of the infrastructure. Various literature and different authors have recommended a good management practice to be one of the sole practice towards success in the sports infrastructure investment while contrary to that leads to the delay of development in the sports industry (Christopher, et al., 2015), however a problem arises in most of developing countries that faces a challenge of poor management of the sports infrastructure (Provincial Executive Council, 2014).

The Sports Development Policy of Tanzania initiates a call of researching on the management practice of sports infrastructure. Under section one (1) (iii) of the challenges section in the Sports Development policy of Tanzania outlines poor management of the sports infrastructure including stadia as one among the problems encountered by the ministry. The

question remains on the management practice applied. Henceforth, this study aims to lift the veil of the sports infrastructure management currently enforced in Tanzania with the objectives to explore the current management practice, policies that support the management of the sports facilities and also explore the management challenges with a destination to propose and recommend a good practice on management of sports infrastructure.

2. LITERATURE REVIEW

Management of sports infrastructure refers to management of sports facilities which are areas with sports functionality where people gather for physical exercise, participate in athletic competitions, or watching sporting events. In other words, sports facilities involve individual buildings or groups of structures designed for exercising, sports training and practice, and competition in various sports. There are a number of sports facilities that are deemed to be involved including stadium, arena, gymnasium, rinks, outdoor fields, pools and supporting facilities. This research specifically addresses stadia management whereas stadia is the plurality word that refers to more than one stadium. According to Webster's dictionary stadia is defined as "a large usually unroofed building with tiers of seats for spectators at sports events". Stadium is literally described as home of sports (Megheirkouni, 2017) which basically means the built environment including sports facilities.

Henceforth, management of the sports infrastructure is in congruence with literature as to engage in: planning, drafting, and funding of the construction and daily operations of sports facilities, drafting and organization of training and business processes, leading those activities and controlling a wide range of participants, processes and sub-elements of these systems (Tapper, 2016). Thus the aspect of principles of management which includes planning, organizing, staffing, directing and controlling has to be taken in consideration, together with the management structure and the management strategies (outsourcing, inhouse or out tasked) should be selected carefully Literature then embraces the fact that management of the sports infrastructure is not equivalent to other types of facilities or properties but should be considered unique since it has unique features [(Sretenka & Ana, 2013) (Tapper, 2016)].

Notably, the existing studies have been conducted in developed economies where there has been advancement in the management of the sports infrastructure for several years, particularly in the United States of America and Europe whereas professional clubs and stakeholders developed awareness about the need for professional management and hence the influx of facilities management in the sports infrastructure this commenced in the second half of the 20th century, in different socio-economic circumstances (Sretenka & Ana, 2013). In developing countries, literature mainly addresses the development and construction of the sports infrastructure intriguing in the aspects of investment whereas there is limited research on the afterlife of the sports infrastructure leaving out the question of the management of the sports infrastructure. Furthermore, there is lack of empirical research in the Tanzania context that seeks to understand the management practice applied in the sports infrastructure. Therefore, this study explores the management of the sports infrastructure in Tanzania. It involves assessing the current management practice applied in sports facilities, exploring various policies that support management of the sports facilities, exploring challenges encountered in sports infrastructure management and how to address the problems and recommending a good practice on management of sports infrastructure in Tanzania.

The conceptual framework for this study interludes the addition of facilities management to the sports infrastructure. Sports infrastructure is a dependent variable that depends on facilities management as the independent variable. The concept delves the fact that integration of the sports infrastructure with facilities management will uphold and yield a sustainable sports infrastructure that will envisage profound benefits such as the social economic benefits in the society, in the nation as a whole and to the individuals living in the nation. Hence the figure 1 illustrates the whole concept of integrating facilities management within the sports infrastructure.

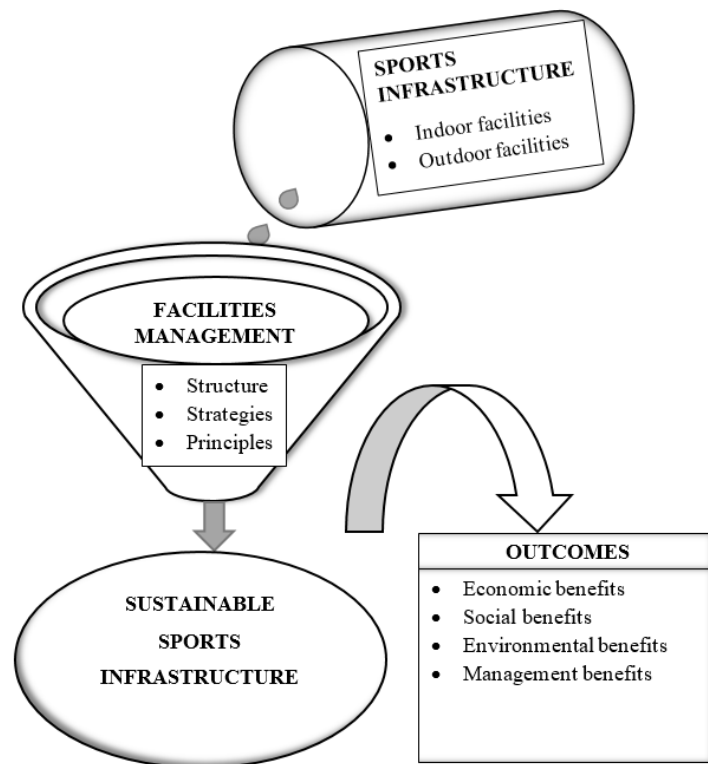


Figure 1: Diagram showing the Relationship between Sports Infrastructure and Facilities Management

3. RESEARCH METHODOLOGY

An in-depth examination of management in sports infrastructure was required to improve the condition of the sports facilities in Tanzania, hence the study adopted a qualitative approach with intention to provide exploratory statements about how management is conducted in the stadia. Case study method was applied whereas the intention was to develop an in-depth analysis of the stadia management and place more emphasize on the full analysis of the management practices (Yin, 2014), Dar es Salaam was the selected case study area because it comprises of sports infrastructure that have the stadium qualifications and also, they represent huge investment due to their high construction costs that symbolizes their economic purpose.

3.1 Study population

The population for this study includes stadium users, stadium service providers and stadium managers in a total of three stadia in Dar es Salaam, namely Benjamin Mkapa stadium, Uhuru

stadium and Azam Complex stadium. Due to the purpose of the study and the approach adopted the participants were selected using a purposive sampling to discriminately interview experts who are rich with information about the study topic. Due to the methodology selected, the sample selected for this research involved twenty-one (21) participants from three selected stadia.

- **Coding**

The stadia coding used in the analysis for the purpose of confidentiality as shown in Figure 1.

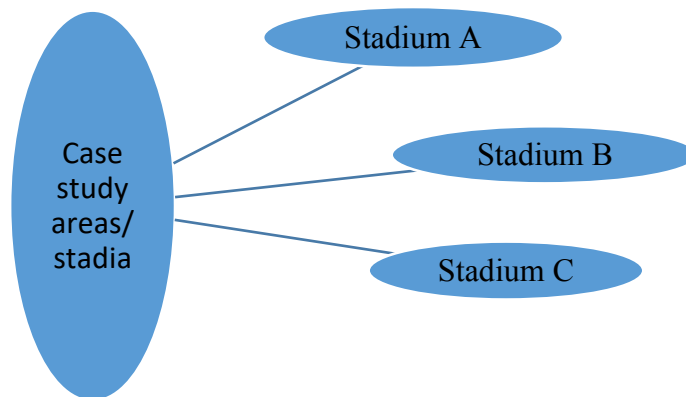


Figure 2: Case study coding

Respondents coding for confidentiality purposes in data analysis and presentation is shown in Table 1.

Table 1: Participant’s code

RESPONDENT	CODE
MANAGERS	M ₁ , M ₂ , M ₃ , M ₄ , M ₅ , M ₆
SERVICE PROVIDERS	S ₁ , S ₂ , S ₃ , S ₄ , S ₅ , S ₆
USERS	U ₁ , U ₂ , U ₃ , U ₄ , U ₅ , U ₆ , U ₇ , U ₈ , U ₉

3.2 Data collection

The constructivist paradigm behind this study has contributed to the methods that were applied for data collection whereas constructivism theory argues that humans generate knowledge and meaning from an interaction between their experiences and ideas (Mogashoa, 2014). Hence the reality was to be extracted from respondents together with their experiences and ideas on the whole aspect of stadia management. The method applied in collection of data regarding management of the sports infrastructure includes structured interview which provided opportunity to discuss managerial aspects in detail and observation method identified the current condition of the study area and to provide additional information to complement what had been said from the interviews conducted.

3.3 Data analysis

Thematic analysis was selected to allow extensive discussion about the major themes that arise from analyzing a qualitative database (Creswell, 2014). Since this research employs a qualitative approach that requires in-depth information hence thematic analysis is essential as it paves way for intensive and in-depth analysis of collected data from the field.

3.4 Validity

The study adopted a seven-point checklist (Yin, 2011) qualitative research from start to finish, (Joseph Maxwell, 2009). Furthermore, a seven-point validity checklist was included so as to strengthen validity of this research and to avoid validity threats. This was recommended by Yin (2011) who adopted the checklist from Joseph Maxwell in 2009 who is among the pioneers of qualitative case study research. The checklist includes intensive long term (field) involvement, rich data, respondent validation, search for discrepant evidence and negative cases, triangulation, quasi-statistics, comparison.

4. FINDINGS AND DISCUSSION

4.1 Participants background information analysis

This set of data was intended to describe basic information of the respondents and to assess for any influence on the research findings. The data consisted of respondents' experience, education level and professionalism. The background information was attained so as to strengthen the credibility of the data whereas respondents have diverse professions, also 67% have more than five years' experience in stadia management. The professional background, experience and educational level of the respondents is shown in Figure 3, Figure 4 and Figure 5 respectively.

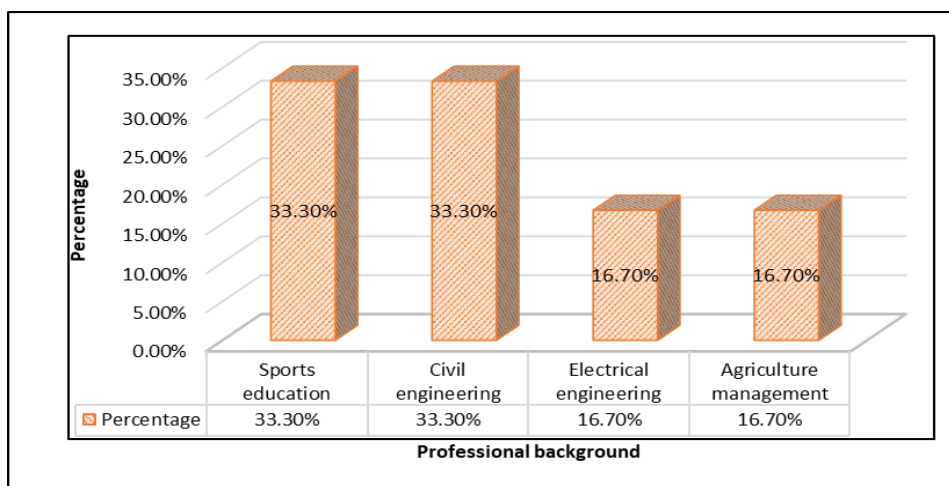


Figure 3: Professional background of participants

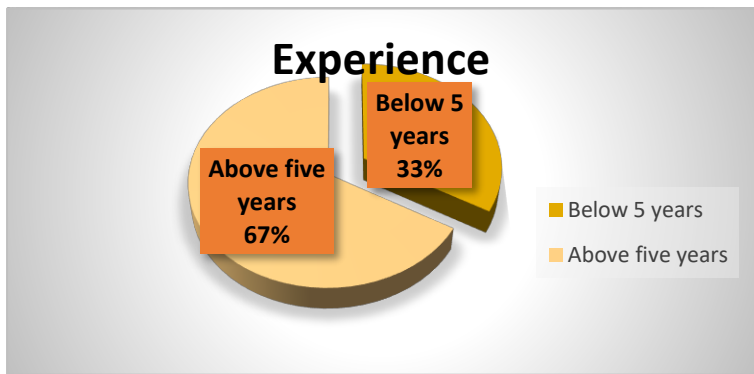


Figure 4: Respondent’s experience

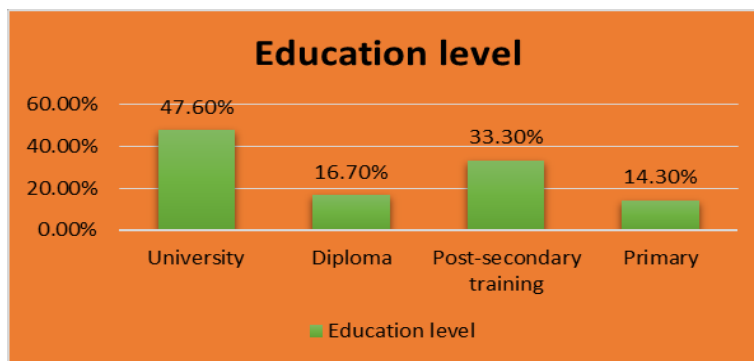


Figure 5: Respondents educational level

4.2 Thematic analysis of collected data based on the research objectives

4.2.1 Current management practice of sports infrastructure

Exploring the current management practice of sports infrastructure was done by assessing various qualitative parameters. The parameters were determining the facilities available which involved identifying what facilities are managed in the stadium, management structure of the stadium, management strategies deployed, and management functions performed in the stadium. From the interviews conducted to the management team of the stadium and documentary review, it was revealed that the facilities available in the sports infrastructure hold a slight difference in comparison to the facilities managed in commercial, residential, or institutional buildings; these include pitch, scoreboards, spectator seats, indoor courts, and playing facilities. This does not exclude the fact that the sports infrastructure also includes common facilities that can be found in any other type of property; these include vertical transportation facilities, communication facilities, ventilation and lighting facilities, solid waste facilities, ground works, plumbing, energy facilities and sanitary installation. The management structure of the stadium included the traditional / functional management structure where the management team is distributed in terms of their functions. Hence there are functional unit managers who deal with a particular task including security, environment, electrical and construction. Thus, there is a lack of integration between the professional background and the management services in the department assigned hence more professional personnel are required in alignment to the function to ensure a smooth running of the management activities in the sports infrastructure. The management strategy employed includes in-house strategy whereas the employed staff members are responsible

for the management activities. Despite the in-house strategy applied in the stadium management, some of the services are out tasked to the service providers which include the maintenance services; this means that both the stadium managers and the external managers from the outsourced firm are responsible for the maintenance activities. Also, the management has two durations namely, on-season management which refers to the management conducted during the league of different sports including the football games, basketball games, netball games, racing or marathons. In Tanzania the season begins every year from August to June. Off-season management refers to management activities conducted after the end of the league, where intense actions are exhibited to prepare the stadia for the coming season, the off-season period begins from the beginning of June to the end of July. The current management practice is illustrated in Figure 10 at the appendix section.

The study also unveiled the fact that the personnel responsible for stadia management had diverse professions that are non-related to facilities management of the stadia and hence becomes a factor causing poor management due to lack of expertism in the field. This is illustrated by figure 6 below.

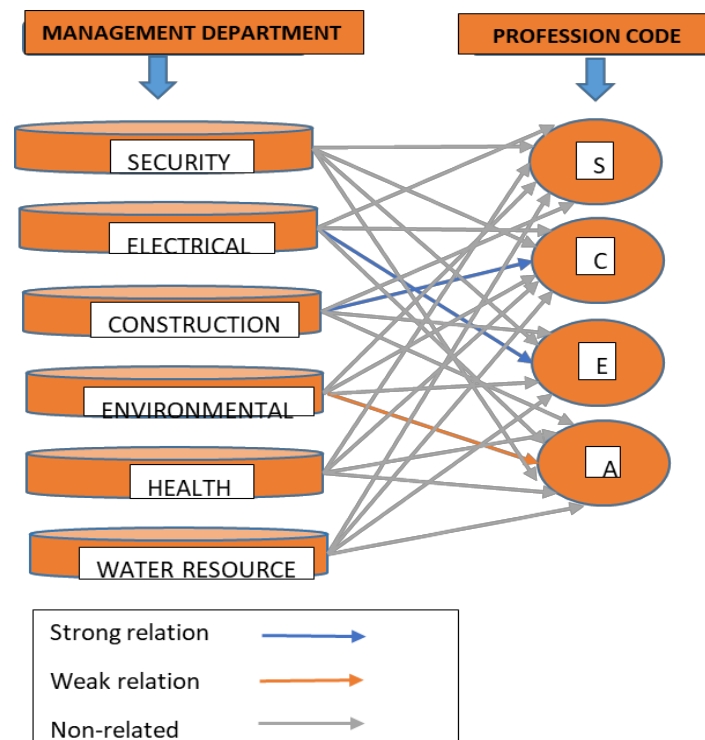


Figure 6: Pattern matching between the management departments and their profession

4.2.2 Policies concerning management of sports infrastructure

The management of sports infrastructure in Tanzania is guided by the Sports Development Policy of Tanzania, by laws formulated by the management team and a series of other legal frameworks that support the management of the sports facilities. These includes Employment and labor relations act of 2004, National health policy of 2007, National water policy of 2002, National environmental policy of 1997, public procurement act of 2004, National security act

of 1970, Tanzania investment act of 1997, public health act of 2009, The water supply and sanitation act of 2009 and the urban water supply act of 1981. Hence the management team ensures implementation, monitoring, reviewing, and updating of the legal frameworks. The categories, themes and remarks as collected from the field is shown in Figure 7.

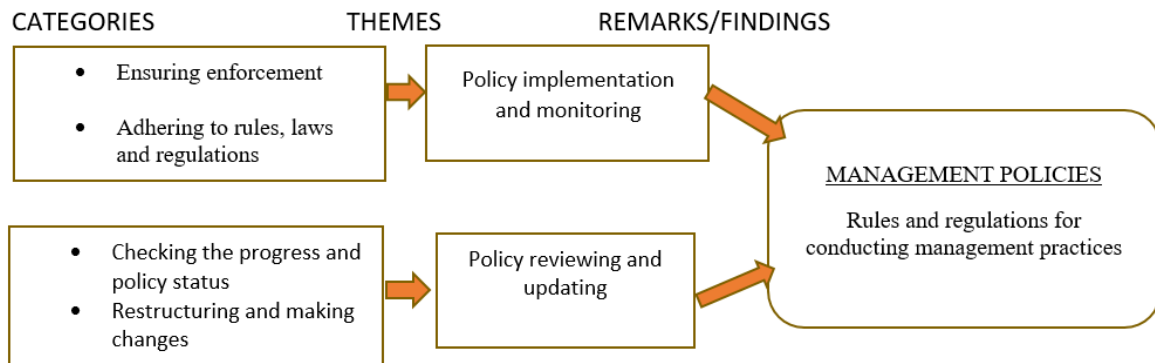


Figure 7: Respondent’s view on challenges faced in management of the sports infrastructure

Both respondents including the managers, service provider and the users of the sports infrastructure had identified challenges in each perspective whereas the security and environmental challenge was pinpointed by both facets of the participants. Figure 8 illustrates the categories, themes and remarks based on field data attained

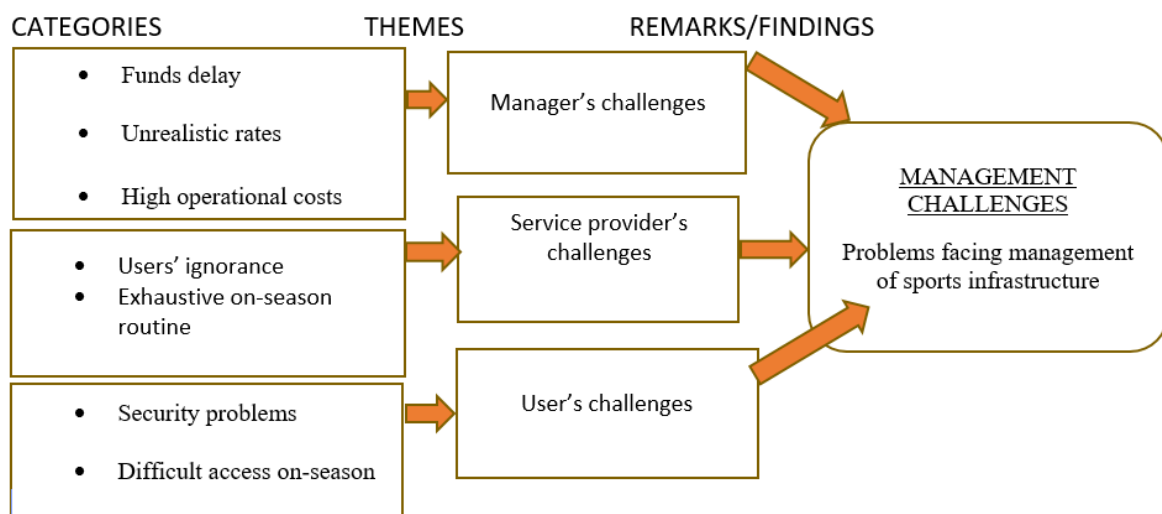


Figure 8: Arriving at themes and remarks from the interview data

5. DISCUSSION AND RECOMMENDATION

The research aimed at exploring the current management practice, policies governing the stadia management, challenges of stadia management and lastly to recommend a management practice in the stadia. The following are recommendations from the research conducted.

5.1 Facilities management approach

The sports facilities require the engagement of facilities managers so as to effectively induce an appropriate management in the structure (Table 2). The researcher recommends the implementation of the management functions in a facility management prospect since the infrastructure contains buildings that need much consideration of the management. Literature has also recommended the utilization of facility managers in the stadium.

Table 2: Respondents view on what should be done

RESPONDENT	RECOMMENDATION
M ₁ , M ₂ , M ₃ , M ₄ , M ₅ and M ₆	<ul style="list-style-type: none"> ● To engage more professionals in the management team. ● To deploy an easy way for management funds access. ● To utilize more investment opportunities.
S ₁ , S ₂ , S ₃ , S ₄ , S ₅ and S ₆	<ul style="list-style-type: none"> ● Create user awareness on hygiene, health and safety. ● Low pressure from the managers so as to perform the tasks diligently.
U ₁ , U ₂ , U ₃ , U ₄ , U ₅ , U ₆ , U ₇ , U ₈ and U ₉	<ul style="list-style-type: none"> ● To establish a reliable user complaints mechanism. ● To enroll an efficient entry mechanism for ease access of the stadium. ● To deploy strong security systems so as to avoid theft.

5.2 Investment focus (customer oriented)

Sports infrastructure is an image of investment but in most cases the infrastructure is perceived only as a recreational facility bailing out the commercial characteristics it holds. This view has to a large extent diminished the business value that the sports infrastructure holds. The managers should diversify their focus to the orientation of boosting up the investment's rate of return which will yield positive economic results to the nation and to the individual. A good benchmark is portrayed by sports infrastructure in developed countries whereas they contribute about 2% of the nation's gross domestic product as one of the economic indicators (Chappelet, 2015).

5.3 Sustainability focus

Properties and facilities of sports infrastructure require huge costs of investments for their construction and operations. These efforts used in constructing the infrastructure deserve a reward, in which maintaining its durability through an effective management is recommended. Sustainability focus will result in a durable sports building for the purpose of current needs without compromising future needs. Various literatures support the focus by establishing management frameworks that provide an integration of functions that together act as a tool for the facilities manager in the achievement of sustainable buildings. One among recommended sustainable facility management frameworks includes the one suggested by (Olaniyi, 2017) which is based on a facilities manager role in sustainable buildings. The roles

have been stipulated from the design stage, construction stage and down to the operational stage. Figure 9 below illustrates the key areas of recommendation including facilities management, investment and sustainability focus.

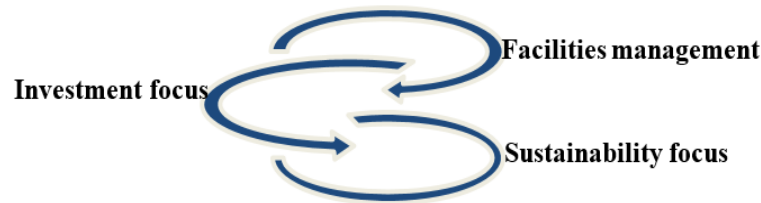


Figure 9: Recommended management practice in sports infrastructure

6. CONCLUSION

At the end it was found by qualitative analysis that the management of the sports infrastructure requires improvements so as to enhance the investment paradigm of the stadia and enable development of the sports industry. The research results vary from the findings stipulated from the commercial and other types of properties. Therefore, this study creates awareness to the facilities managers in aspects concerning the management of properties with sports purpose. In addition, the study alerts property managers on areas of concentration when managing the facilities in the sports infrastructure. This study is exploratory in nature with a purpose of extracting management knowledge. Furthermore, the author believes that this study can perpetuate further studies on how to conduct successful management activities in the stadium. The results obtained may provide useful input into the career of facilities manager so as to expand the scope of facilities management.

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APPENDIX

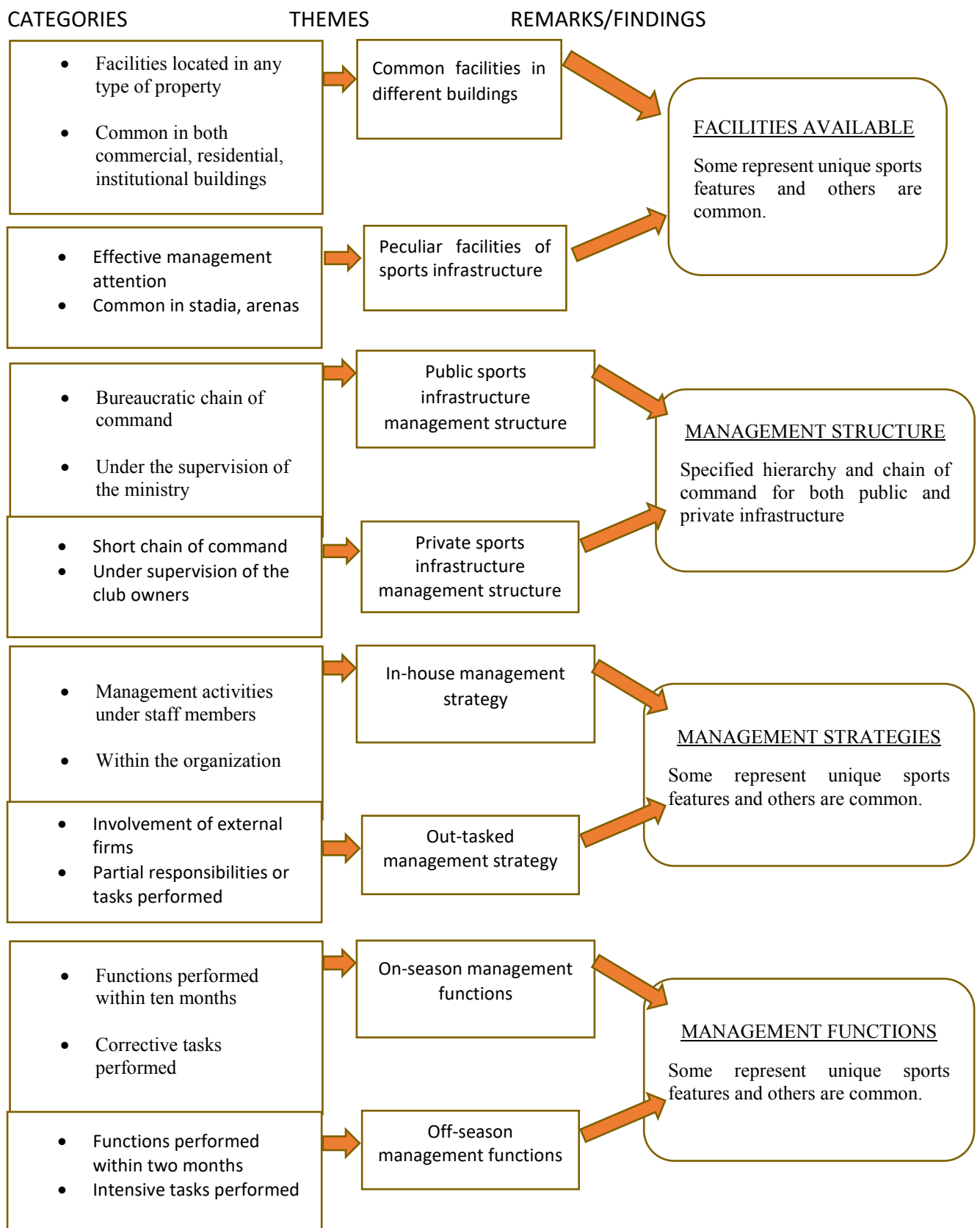


Figure 10: Arriving at themes and remarks from the current stadia management