

**FACTORS INFLUENCING THE MANAGEMENT OF
WATER HYACINTH WEED IN LAKE VICTORIA
KISUMU COUNTY, KENYA**

BY

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DECLARATION

This research project report is my original work and had not been presented for degree award in any University.

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This research Project report has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this research project to my husband Mr. Felix Maura for his support, motivation, patience and understanding which enabled me to complete this study ,to my Sisters Doreen, Cathy and Evelyne and Bothers Jack, Greg and Daniel for their support towards this assignment.

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ABBREVIATION/ACRONYMS

AWP	Annual Work Plan
CRBC	China Road and Bridge Company
EAC	East Africa Community
GOK	Government of Kenya
IPMA	International Project Management Association)
JKIA	Jomo Kenyatta International Airport
KMA	Kenya Maritime Authority
LVEMP	Lake Victoria Environmental Management Program
NASA	National Aeronautics and Space Administration's
ODA	Official development assistance
	Public Private Partnership
U	Public private partnership unit
SGR	Standard gauge railway
WHO	World Health Organization

ABSTRACT

Historically, marine transport on the lake, together with the rail network, played a key part on the transportation of cargo and passengers to and from the land-locked countries. Inland shipping on Lake Victoria formed an important component of an intermodal supply chain along the Central and Northern Corridor. This study therefore intended to investigate factors influencing the management of water hyacinth weed in lake Victoria Kisumu County, Kenya. The study was informed by the following objectives; to determine the Influence of Procurement procedures, to examine the Influence of Budgetary allocation, to determine the Influence of Project Manager competencies, to examine the effectiveness of community participation and to establish the Influence of communication management in the management of water hyacinth weed in Lake Victoria Kisumu County. The target population comprised of 130 respondent; 10 Community Elders, 50 Fishermen, 50 fish traders and 20 Project Team Managers .The study adapted a descriptive survey design given that it provided an in-depth analysis of the issue under investigation. Stratified and Purposive random sampling techniques were used to arrive at the sample size of 91.Data was collected through the administering of questionnaire to the respondents. The result of the study revealed that; Procurement Procedure in the management of water hyacinth weed in lake Victoria is important with majority of a mean of 4.41 indicating that bureaucracy in Procurement Process hinders the management of water hyacinth weed in lake Victoria .However, Minority felt that time frame for tendering process and experts to carry out the evaluation were not of a great influence scoring a mean of 3.25 and 3.10 respectively. For the budgetary allocation, the study revealed that appropriate and effective budget was key with a mean of 4.42. However at an average of 1.51 indicated that the budgetary allocations are normally utilized as per the plan and an average of 3.78 indicated that Budget allocation leads to success in the management of water hyacinth weed in lake Victoria. Also, results indicated that the project manager competencies in the management of water hyacinth weed in lake Victoria are important with a mean of 4.37 of the respondents confirmed that is the role of the Project Manager to ensure that projects are delivered on time as per the schedule. Nonetheless, an average of 2.83 affirmed that the level of education does not necessary show the level of competency of the Project Manager. The study also strongly indicated that failure to involve community in the management of water hyacinth weed could lead to a negative influence with a mean of 4.79.However, respondent with a mean of 2.73 indicated that community should not be involved in specific nature of work within the management of water hyacinth weed in lake. The result clearly demonstrated by a mean of 4.36of the respondents that efficient and effective communication leads to error and problem detection within the management of water hyacinth weed. However respondent with a mean of 3.04 were of the Opinion that communication is not key factor to management of water hyacinth weed. This study concluded that reviving of the port operation would not only make the port activities attractive but enhanced economic growth in the regions surrounded by the Lake by easing the movement of goods and services within Kenya and abroad. This can only be achieved through proper and effective management of water hyacinth weed. The study recommends that further research should be done on the ways of managing the hyacinth weed and policy measures that can be strategically developed in order to enhance the management of the weed.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Management is the process of maintaining a well designed environment in which individuals, efficiently accomplish selected aims working together in groups (Koontz and Weihrich 1990, p. 4). In addition, Sisk, (1973) .Also defines Management as the coordination of all resources through the process of planning, organizing directing and controlling in order to attain stated objective.

To begin with, management is about coming up with solutions to problems that keep emerging time and time again in an organization's efforts to achieve its plans and objectives. The process of solving a problem starts with identification of the problem followed by analysis and the development of strategies to solve the problems. The other important aspect in management is administration which involves following laid down rules and procedures for the execution, control, communication, delegation and crisis management. The procedures and rules should not be seen as ends in themselves but a means to achieving the end result. Human asset administration ought to be founded on key reconciliation of human asset, appraisal of specialists, and trade of thoughts amongst investors and laborers. At long last, hierarchical initiative ought to be produced along lines of relational relationship, cooperation, self-inspiration to perform, enthusiastic quality and development to deal with circumstances, individual respectability, and general administration abilities.

Like all other activities management requires planning and a strategic resolve aimed at achieving specific objectives. Management is the art and science of getting things done the right way through the coordinated efforts of other people, in this context staff members. Key activities carried out by managers are: Interpersonal activities, decisional activities informative activities Management involves a series of interrelated functions and that is why it is considered a process. It involves clearly stating the goals of the organization and executing action plans to achieve the desired goal. The process of

management includes planning, organizing, staffing, directing and controlling functions. The process of management has implications. Those implications are as follows; Social Process: Management includes social cooperations among individuals. Objectives can be accomplished just when relations between individuals are regenerative. Human factor is the most essential piece of the administration. Furthermore Integrated Process: Management brings human, physical and money related assets together to put into exertion. Administration likewise coordinates human endeavors to keep up concordance among them. Thirdly Continuous Process: Management includes ceaseless recognizing and taking care of issues. It is rehashed occasionally till the objective is accomplished.

Building competitive advantage by developing countries is usually done in order to manage the challenges and complexities. However this is usually not a matter of coming up with a clean list of issues. It is important that the management should; identify areas of competencies must before embarking the process of building competitive advantage and then discuss and developed project teams in their organizations so that they address both the specific global influences on managing and the specific indigenous influences. Developing countries has a series of looming environmental crises. These crises arise partly due to the absence of development strategies thereby subjecting these countries to socio-economic conditions. education and environmental sensitization should be carried out. However, these programmes are time consuming and are not guaranteed to achieve the desired results because of the mindset of the citizens of these countries. There is also need for various regions to integrate economic and environmental plans systematically. Clearly, there is little time hence the need for a comprehensive action to save some of the capital assets (such as forests, fresh water, soils, etc.) which are likely to be irretrievably damaged.

Just like in other developing countries managers, in sub-Saharan Africa as a whole find it easy to enumerate the constraints and threats of operating in Southern part of Africa. To begin with, there are serious socio-economic threats to stability, unemployment and low profitability in sub-Saharan Africa. These may similarly incorporate the issues of effectively finishing the change far from tyrant govern towards a hearty majority rules system with acquired monetary issues and additionally high imbalances of riches, ethnic

competition and levels of savagery. These issues have echoes as far away as the previous Soviet nations. Such residential issues are additionally convoluted by the aggressive powers identified with globalization. Ethnic requirements are intrinsic inside South Africa's exceedingly divided society and moves towards redistribution through governmental policy regarding minorities in society, and the ramifications of oppression those not secured by governmental policy regarding minorities in society, may harbor facilitate dangers, (20) a considerable lot of them of worry for other African nations also. However an association's capacity to have the capacity to transform these requirements around into circumstances may have the effect between a mal-versatile administration framework and a profoundly versatile framework.

Water hyacinth plant has also been identified as the worst water plant and has gained a lot of attention as an invasive species both locally and internationally (Zhang et al., 2010). The weed can cause serious socio-economic as well as environmental challenges. However according to Ndimele et al., (2011); Villamagna and Murphy, (2010), the weed is beneficial in providing solar energy and aquatic nutrients for domestic biomass production. It is found in ponds, dambos, lakes, estuaries, wetlands, marshes, slow waterways, streams, and conduits in the lower scopes there is stimulated weed growth through the inflow of nutrient rich water from , results of modern waste, urban and agricultural waste and untreated waste water. Its distribution may increase into higher scopes as temperatures rise, spreading the problem to earlier hyacinth free regions as pointed out by ((Rahel and Olden, 2008), in their climate change models.

In tropical and subtropical regions Water hyacinth is one of the most undesired plant, and there has been many attempts control it or completely eliminate it. Transforming it into productive use is considered as sustainable and possibly cheaper method of control. The weed can be used as a compost and mulch for soil improvement, vegetable, fodder and green manure. Many studiesw have been conserned with research about its use as a livestock feed material. Integrated fish-pig-water hyacinth farming systems have been developed in South-East Asia, in order to increase global animal production. Yang Huazhu et al., 2001) conducted a study and established the following facts: water hyacinths grown in fish ponds have higher nutritive value (higher protein content) and

can be fed to fish and pigs in various structures. Fish and pig composts prepare angle lakes and give manure to water hyacinth. Animals are normally fed the elevated part (leaves and stems without the roots) or just the leaves, yet in some cases the entire plant (root included) is utilized. Water hyacinth can be nourished crisp, ensiled, or dried yet numerous different procedures are utilized or have been taken a stab at, including cooking and aging

Many people working tirelessly to clear water hyacinth from the Lakes and waterways in their country may feel that they are particularly unlucky in having to fight such a persistent and expensive weed, without fully realizing what an international pest the plant has become. Some countries have had litter resources other than hand labour to make any attempt on hyacinth invasions and therefore have allowed the spread of the weed to take its course. Some countries, on the other hand, like New Zealand, recognized the danger of the hyacinth infestation while it was still relatively small and have vigorously carried out an eradication programme. In South America hyacinth is abundant. In British Guiana it is an important component of weeds which block the transport canals in the Sugar estate and is no doubt to be found in many other places in S. America as this is its country of Origin.

1.1.1 The Profile of the Study

The water hyacinth, commonly referred to as hyacinth weed in Kenya is an invasive aquatic plant species that has spread rapidly across Lake Victoria and can be readily found in ports like Kisumu. It infested Kenyan waterways in mid 1980s at Lake Naivasha and Lake Victoria in 1992 (Njoka et al., 1988).

Although the weed is indigenous to South America, it is currently present on every continent except Europe and Antarctica. Its large blue flower and big green leaves makes it aesthetically pleasing in full bloom and a favorite aquatic species in water gardens. Man's introduction of the plant to new environments, its ability to adapt to a variety of habitats, and its ability to reproduce asexually at a rapid rate have all contributed to the plant's sudden emergence across the globe. Large colonies of water hyacinth, or mats,

double in surface area every four to seven days or an average increase of 8% every day. Vegetative propagation, the process through which the hyacinth reproduces asexually, means that it only takes one plant in ideal growing conditions to enact an invasion.

These factors have contributed to the proliferation of the weed into Lake Victoria through the White Nile since the 1990s, attaining a critical level of volume in 1997. Although only 6% of Lake Victoria the Winam Gulf is part of Kenya, Kisumu, Ndere, Homa Bay, and Mfangano are home to a disproportionate hyacinth weed population compared to Ugandan and Tanzanian waters. Indeed, the presence of water hyacinth in Kisumu (and elsewhere) has altered the aquatic environment, affected the local economy, and created serious health hazards. Controlling, eradicating, and reusing the weed are among the most pressing environmental issues in Kenya today.

The rapid emergence of the hyacinth weed has had devastating consequences for Lake Victoria and those Kenyans who lived around it. Hyacinth mats block rivers, clog irrigation canals and electric turbine intakes, hinder fishing, and create breeding grounds for diseases like bilharzia, malaria, and river blindness. It affects transportation and navigation on Lake Victoria for oar- and engine-propelled boats alike as the thick mats are virtually impenetrable. Dangerous predators like snakes and crocodiles can also ambush unsuspecting fisherman as they wade through the weeds towing their boats to open waters. Docking, particularly in ports like Kisumu, is quite difficult, inhibiting the loading and unloading of ships. Floating weeds make netting fish impossible, and have a negative impact on local fish populations as well.

According to biologist Gopal, (1987), it has been estimated that the oxygen depleting load of one hectare of water hyacinth (sic) mat equals the sewage created by 80 people. This action lowers the natural ability of the water body (sic) to absorb organic pollution, and creates a septic and odorous condition.” The ability of the hyacinth weed to dissolve oxygen content can render whole sections of freshwater bodies “dead zones”. Often visible to humans in large-scale “fish kills” while also providing a suitable habitat for new, non-native species which live on the mats, or predators like the invasive Nile perch

in Lake Victoria that use the mats as temporary cover to stalk their prey. Hyacinth mats may also provide cover for other fish species which the Nile perch prey on.

These lifeless zones have been devastating for the fishing industry in Kisumu and other places affected by the hyacinth infestation. Many people in affected areas like Kisumu have begun to use the weed in new industries as a result. After initially dithering to control the spread of the hyacinth weed allegedly due to political factors, the Kenyan government has finally woken up to the devastating impact of the hyacinth weed. It tried out several methods to control the weed. One of the first control methods implemented by the Kenyan government in the 1990s was a manual picking program in which local Kenyans would physically extract the weed from the lake. The government hired fishermen who would pull the weed out of the lake by hand from their boats, drying them and later burning them in large piles. Mechanical control methods that have also been implemented include the building of floating barriers and using floating cutting and harvesting machines. Progress is slow, however, and the cost of labor is expensive. The danger posed to fisherman by disease and wild animals is exacerbated by the process of hand-picking the weed from the water too.

The chemical control method was another eradication process at the disposal of the Kenyan government. These chemicals (like 2, 4-D) can be sprayed by hand, boat, or aircraft to kill whole mats. The toxicity of chemicals to natural vegetation and agriculture, however, can have serious consequences on human health and the surrounding environment. Indeed, the spraying of 2, 4-D in the early 1970s caused a massive public outcry due to an increase in deformed babies and abortions in areas surrounding other chemical treatment sites in East Africa.

A third approach to controlling the hyacinth population is the biological method. *Neochetina bruchi* and *eichhorniae*, two weevil subspecies, have been part of the eradication effort in Winam Gulf because of their preference for hyacinth leaves and petioles. The introduction of weevils in Lake Victoria has had some success, but biological methods have limitations as well. The hatchlings make basic harm the petioles while the grown-ups cause harm by nourishing on the clears out. The most critical effects

could be seen on the quantity of rametes, and harmed petioles. A decent pointer for affect is the quantity of harmed petioles revealed by (Julien et al., 1999). The release of weevils on Lake Victoria in the late 1990s, for instance, hurt crop yields as the insects fed on maize grown around the lake in addition to their intended food source.

While “aggressive removal effort cut the plant back to manageable levels in December 2006, the water hyacinth was back.” In 2006 and 2007, “heavy rains and nutrient-rich runoff fueled an even more extreme outbreak. The plant-covered area increased from about 40 square kilometers in March 2007 to more than 400 square kilometers just a month later about one-third of Winam Gulf.” As the National Aeronautics and Space Administration’s (NASA) satellite imagery indicates, farm run-off in November and December of 2006 during the wet season directly correlated with the explosion in the water hyacinth population on the lake because of the nitrogen content in fertilizer and pesticides.

In the meantime, as the government struggles to control the spread and impact hyacinth weed, local entrepreneurs have taken the initiative to turn the weed into profitable ventures. Behind every cloud there is a silver lining. Indeed, small businesses in Kisumu have begun to turn dried water hyacinth stalks into ornamental objects, buckets, furniture including tables and chairs, and even coffins.

Dried water hyacinth also has many applications in household gardening and industrial agriculture and livestock rearing. The plant is high in protein comparable to milk protein and is useful in plant and animal nutrition, as well as fertilization. One of the most efficient uses of dried water hyacinth, however, occurs when it is converted into fuel. Biogas is a combination of different gases which can be harnessed for energy use, particularly cooking. Chopped and ground and manually placed in fermentation plants and digesters, harvested hyacinth weed is a potential fuel source for many households throughout Africa and the Middle East, and has proven particularly useful in Kisumu.

Nevertheless, the growth and spread of water hyacinth colonies continues to pose a constant problem for Kisumu, and Lake Victoria as a whole. There is a need to control

the weed. If eradication and control methods are imperfect then new strategies must be implemented to, if nothing else, sustain the economies which have been negatively affected by the plant. Indeed, physical, chemical, and biological approaches to controlling the plant can and have been integrated to diminish the weed's population on Lake Victoria, but are not a permanent solution to the many problems the weed poses.

Many of these methods themselves have a detrimental effect on the environment as well, though they are still practiced with ambivalence by the government. A diminished fishing industry and potential health risks posed by the spread of the plant in Winam Gulf means that local economies in places like Kisumu will need to continue to reinvent themselves in order to utilize the abundant weed for their own benefit. Though the hyacinth weed has myriad advantages as in the fashioning of ornamental wears and other craft goods, fertilizer, animal feed, and, most significantly, biogas it is in the best interest of every Kenyan affected by the weed to participate in its manual harvesting if possible. If a sustained, comprehensive program one that takes into account every influential factor in water hyacinth growth, from farming practices and pollution to biological control and economic use Kisumu could be an example before the world in adapting to the weed.

The national government of Kenya is negotiating for a Sh14 billion loan from a Chinese bank to fund construction of a second port in Kisumu. It also plans to build a modern port in Kisumu County. The plans have reached advanced stages and feasibility studies had likewise mapped out an expansion course for the standard gage railroad (SGR) which will achieve Kisumu in the following period of development. A nine kilometer extend worked off the Naivasha-Kisumu-Malaba line will end at the port where a coordinations center is additionally arranged, (Nyabundi , 2016). The business concurrences with CRBC had been marked henceforth hoping to close the monetary concurrence with the Export-Import Bank of China after which development will start, Irungu, (2016) .

The new area, he stated, had been picked due to accessibility of extensive tracts of land for development and for setting up of a coordination's center point and a modern stop to rejuvenate EAC center aspirations. The CRBC will develop present day compartments, cutting edge freight taking care of hardware and digging the entrance channel to

empower the port to deal with greater vessels. The Kenya Ports Authority has said it would get bigger vessels than those that berthed at the old port to twofold stakes in oceanic exchange the area.

1.2 Statement of the Problem

Historically, marine transport on the lake, together with the rail network, played a key part on the transportation of cargo and passengers to and from the land-locked countries. Inland shipping on Lake Victoria formed an important component of an intermodal supply chain along the Central and Northern Corridor linking to Mombasa and Dar es Salaam ports. The port, appraised by shippers as the best in East Africa inferable from its vital area, just gets at most three vessels in seven days. However in the event that all around kept up and used, the port would serve Jinja, Mwanza in Tanzania, Entebbe in Uganda and Muhoma Bay in Rwanda. The port can likewise give a shorter and less expensive fare course for countries in the Great Lakes area through Lake Victoria, (Kenya Ports Authority, 2016).

Currently, the Port of Kisumu operates only at a fraction of its capacity and former throughput. The port's operations have been gagged by the omnipresent hyacinth weed deductively known as *Eichhorniacrassipes* and substantial siltation. At that point there are the bottlenecks related with enactments addressing the organizations accused of its administration, There is little action at the port and in the inland holder station set up to encourage exchange through the railroad. The office that could acquire the nation a huge number of dollars in cargo demands has been changed over into a site for neighborhood travelers who pay a unimportant Sh20 per head as door section expense. Traveler ship port, concentrating on traveler transport between EAC goals around Lake Victoria has moved toward becoming in available and all parts of human life once a water body on which man so much depends is attacked and secured by the weed mats. Fisheries, water supply, hydroelectric power age, human Health, horticulture, transport, biodiversity, evapo-transpiration and expanded cost of water treatment are a portion of the unfavorable impacts experienced by the general population of Kisumu district. (Wandayi, 2017)

Also tourism operators have been affected in that the magnificent view of the lake, seen from vital tall working in Kisumu Town, has likewise been dulled by the offensive weed in this manner Tourist going visiting Kisumu will not find the lake attractive by any means unless the hyacinth weed is completely eliminated.

Presently a Sh81 million water hyacinth harvester is lying idle at the Kisumu Port as the weed spreads further on Lake Victoria. The Lake Victoria Environmental Management Program (LVEMP) bought the equipment after it was proved the weed can be mechanically removed. This is after Kenya Maritime Authority (KMA) partnered with the National Water Conservation and Pipeline Corporation to harvest the hyacinth. Manyoro (2017), said lake users may have to wait longer to see a clear lake as certain procedures have to be followed before the machine can become operational. The process has taken too long and the people who entirely depend on the lake for their livelihood continue to suffer even after the involvement of different partners to restore the operations in and at the port.

Thomas, et al (2008), states that the front-end of the project is in any event as basic as the ensuing stages that arrangement with point by point arranging and execution. The best project team cannot succeed in the implementation of a poor project plan and activities started the wrong way can lead to project failure.

1.3 Purpose of the Project

The purpose of this project was to determine factors influencing the Management of Water hyacinth weed in Lake Victoria Kisumu County, Kenya

1.4 Research Objectives

1. To determine the Influence of Procurement procedures in the Management of Water hyacinth weed in Lake Victoria.
2. To examine the Influence of Budgetary allocation in the Management of Water hyacinth weed in Lake Victoria.
3. To determine the Influence of Project Manager competencies in the Management of Water hyacinth weed in Lake Victoria.

4. To know the effectiveness of community participation in the Management of Water hyacinth weed in Lake Victoria.
5. To establish the Influence of communication management in the Management of Water hyacinth weed in Lake Victoria.

1.5 Research Questions

In order to determine the factors influencing the Management of water hyacinth weed in lake Victoria, Kisumu County, the following questions were used to arrive at the finding.

1. How does procurement procedure Influence the Management of Water hyacinth weed in Lake Victoria?
2. What Influence does Resource allocation have in the Management of Water hyacinth weed in Lake Victoria?
3. How does project manager competencies Influence the Management of Water hyacinth weed in Lake Victoria?
4. How do the Community participation Influence the Management of Water hyacinth weed in Lake Victoria?
5. What extent do communication management Influences the Management of Water hyacinth weed in Lake Victoria?

1.6 Significance of the Study

For the management of the Kisumu sea port, the findings of this study may be important in assisting them in understanding of the factors influencing the Management of Water hyacinth weed in Lake Victoria therefore informing them on necessary mitigation strategies to mitigate on their negative effects.

To academicians and future researchers, the study would be important in building on the factors the Management of Water hyacinth weed in Lake Victoria Kisumu County, Kenya through the suggestion of areas requiring further research. In addition, the findings of this study would be important source of reference for future scholars and researchers.

1.7 Limitation of the Study

The study was faced the limitation of time. There was Limited time and un-availability of respondents to assist in giving the accurate information needed. However to resolve the challenges, the data collection was undertaken on a working day where the entire sample target was present. Another limitation was the language barrier and low literacy level of the community members, however, the limitations was resolved by hiring a translator who assisted in the data collection exercise. Also the study was only conducted within Kisumu town West constituency, south west ward hence limiting the number of respondents .However the study ensured that the survey design give a representation of the entire population

1.8 Delimitation of the Study

The study was carried out at Kisumu sea port in Kisumu west constituency south west ward location Kisumu County. The objective of the Study is to find out the factors influencing the Management of Water hyacinth weed in Lake Victoria and it met its objective by getting the required information from the respondent within Kisumu region through questionnaires to complete the study.

1.9 Basic Assumption of the Study

This research study was based on the assumption that the respondents made time to fill in the questionnaire honestly as required and the data given by the respondents was correct and accurate.

1.10 Definition of Significance Terms Used in the Study

Budgetary Allocation

Is the amount set aside to carry out specific planned activity.

Community participation

The involvement of people in a community in projects to solve their own problems

Communication management

This is a way in which flow of information and feedback is ensured in the course of work/projects from one person to another.

Procurement Procedures

Is the identification of a suitable entity through a tendering or competitive bidding process to qualify who will undertake the supply the goods and services needed in the project.

Project manager competencies

These are the skills which a project manager needs to successfully manage the project.

Management

This is a process of ensuring that a particular activity or process is completed to achieve a given results.

1.11 Organization of the Study

This study comprises of a total of five chapters. The first chapter consisted of the background of the study, statement of the problem, objectives of the study, significance ,limitations & delimitation of the study that may be faced during data collection. It also included definition of terms and the organization of the study. The second chapter included literature review, theoretical frame work, and conceptual framework and Research gap. The third Chapter included Research design, Target population, sampling techniques and sample size, data collection instruments, data pilot study which ensured validity and reliability of the instrument, Data analysis and ethical consideration. The fourth chapter included data analysis, presentation and interpretation and finally the fifth chapter included summery of findings, Discussion, conclusions and recommendation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed both the Empirical and theoretical frameworks related to the Management of the Public private partnership projects. It developed the Conceptual Framework and reviewed the Independent Variables in relation to the Dependent Variable.

2.2 Management of Water Hyacinth

Water hyacinth is one of the gainful and the strong of all weeds (Gajalakshmi et al., 2001;Gajalakshmi et al., 2002) and develops abundantly in dirtied new water bodies particularly in those that are debased with natural waste (Pramanik, 2010).All Management forms require a definite arranging and possibility contemplate in view of the latest information and data normally gathered from an assortment of essential and optional sources and past studies. Major focal points of appropriate task arranging are: to wipe out or decrease vulnerability, to enhance productivity of the operation, to get a superior comprehension of undertaking goals, and to give a premise to observing and controlling work (Kerzner, 2006).

Kerzner (2006), distinguishes nine noteworthy segments of the arranging stage: objective, program, plan, spending plan, estimate, association strategy, technique and standard. The PMBOK, which records 44 forms, recognized 21 as arranging forms (PMI, 2004). Zwikael and Globerson (2006), distinguished the accompanying six arranging forms as the ones that exceedingly add to extend achievement: meaning of exercises to be performed in the task, plan advancement, authoritative arranging, staff obtaining, correspondences arranging and building up a venture design.

Any task ought to be liable to social money saving advantage investigation in light of a legitimate plausibility concentrate to analyze its open and private advantages. Consequences of the investigation give a fundamental contribution to the political basic

leadership process. A monetary examination with due thought of all expenses will likewise must be embraced to survey the business suitability of an undertaking. The monetary and money related investigations are attempted to set up the need and size of the task, and furthermore to give the premise to any administration bolster (counting cooperation in financing), if important. Acost/advantage appraisal should shape the establishment for any Project - related decision (A. Pārups, 2015), which thus additionally require the contribution from one of the general basic achievement factors accessibility of skill in the general population sector. In request to adjust open area objectives and abilities with Project use so as to accomplish a helpful outcome, in light of monetary and money related assessment (A.Matīss, 2015).

All expense computations for any activity should be based on its life cycle costs estimates. to in order to establish the business case for a project it is important to consider the estimated life cycle expense of a project. Such costs may include: Operational costs, Capital cost (construction, equipment and land costs); Life cycle maintenance and refurbishment costs; Soft costs (interest cost, bidding and development costs, management and consultation fees, etc.); and Cost of any necessary associated/complementary infrastructure (for example, access or physical integration infrastructure) the transaction advisor is ideally the one responsible for carrying out the tasks involved in the project planning and feasibility study. A point by point terms of reference for the research is prepared by the implementing agency and the conduct of the study is closely monitored by the in-house project team who are directly responsible for in overseeing the progress. The project planning quality, support for stakeholders, consideration of the major Management issues in the planning stage, and Management planning largely determine the success of the project.

The primary issues that are for the most part considered in venture arranging are: Project determination and engagement with the private segment; Realistic request investigation; and choosing area, structure and size of the task; Social and ecological effects and moderation measures; Sector particular issues physical and normal attributes; Legal and administrative viewpoints that the undertaking needs to fulfill; Pricing of the item and administrations; Management issues; Liabilities on the legislature and government bolster

that might be required; and Financing Some of these issues require more intricate talk and are considered in partitioned areas. Arranging stage is extremely critical consequently failing to understand the situation from the beginning will not be right for quite a while.

Munns and Bjeirmi (1996), make a comparative point in expressing that a venture which is imperfect from the beginning times is probably not going to be spared by great execution. Actually effective execution may matter to just to the venture group, while the more extensive association will see the undertaking as a disappointment. Besner and Hobbs (2011), correspondingly express the most imperative investigation and introductory plans are finished amid the front-end of the venture. In the event that the wrong bearing or no reasonable course is taken amid the early definition stage, it is constantly hard to recover the venture on track.

2.3 Procurement procedures and Management of Water Hyacinth

According to Ng, Wong and Wong, (2012); Li et al., (2005) nations are progressively utilizing open private partnership, obtainment course of action to convey works and administrations in both developed and developing countries. Syuhaida & Aminah, (2009) noted that the private sector is being accustomed to giving public partnerships through associations keeping in mind the end goal is to address the infrastructural shortage without the monetary responsibility to the state. This strategy is embraced with the goal that the constrained accessible assets could be directed to different sectors (Udechukwu, 2012).

A competitive process is widely considered the best practice method of procuring Project contracts. Any Project procurement requires a set of procurement guidelines or strategy. Laedre et al, (2006) point out that it is vital for organizations to keep in mind that the end goal is to improve project execution, an increased understanding of how different procurement systems influence parts of task execution. Wardani et al,(2006) stated that customers have a tendency to pick those acquirement techniques they have a propensity for utilizing, paying little heed to any contrasts between the project. Procurement procedures ought to be custom fitted to the satisfaction and fulfillment of various task targets and avoid unacceptable standards, (Laedre et al, 2006).

Another important element in procurement is the Specification which is an arrangement of recorded prerequisites to be fulfilled by a material, plan, item, or administration (ASTM International, 2012). The general motivation behind a detail is to give a premise to getting a decent or administration that fulfill a specific need at a prudent cost and to welcome most extreme sensible rivalry (Lloyd, 2004). Particular sets limits and in this manner possibly takes out things that are outside the limits drawn. Details ought to be refreshed on the premise of market substances, ought to be a piece of the offer records, should precede the arrangement of offering reports and ought to be set up by the individuals who comprehend what is required or by an acquisition specialist or an advisor if there should be an occurrence of complex particulars (PPOA, 2014).

In projects, the attributes of requirements results in the identification of a deliverable or set of expectations. A deliverable is an unmistakable yield that must be given under a formalized agreement (Ryan, 2005). In project agreements, expectations are usually fixed to points of reference. A point of reference is an estimation of progress toward a result. For a typical project, milestone may be the completion of analysis and communication of a draft report followed by correction of draft report and delivery of the last report. Restricted bidding may be used as the bid invitation method where the nature of the procurement is such that the organization is able to define what the outcomes are, but not necessarily how they delivered. This is where good progress is the driver and can clearly be focused on.

Different innovative solutions can be offered by the supply provided that the performance meets the needs of the organization (Brown et al, 2001). In instances where there is a direct match between the specifications of the organization and the solutions offered by the suppliers restricted bidding method can be used by the organization. Expression of Interest through which suppliers are shortlisted followed by a tendering process. The choice as to which is most proper shift contingent on the nature, scope, esteem, level of hazard and unpredictability of the project (Baily,. et al, 2005). The two main bid invitation methods used in Kenya are open bidding and restricted bidding.

Identifying a qualified contractor is one of the most important responsibilities performed by procurement committees when procuring for project. During bid evaluation, each offer must be carefully considered, on an equal basis, against the published evaluation criteria.

The procedure must take after the approach and strategy set out in the acquirement archives. The assessment board must decide the best provider in view of the data gave by providers in their offer. The assessment should consider ability, limit and incentive for cash over the entire of-life of the acquisition. Due tirelessness ought to be utilized to check that the favored provider has the limit and ability to effectively convey against the predefined necessities Chua et al, (1997). Clear, succinct and exhaustive notes are to be taken of all assessment board talks and discoveries. The obtainment capacity should keep a full record of how each offer was surveyed against the criteria and show that each got due and reasonable thought. Where an offer is rejected the explanations behind the dismissal must identify with the assessment criteria, be reasonable, plainly clarified and recorded in composing.

After the Contract negotiation in projects, a formal discussion between the parties involved in the project is held so as to reach an agreement. It is tied in with achieving concession to the basic terms of the agreement. It incorporates a trade of offers, concessions and bartering. For collective connections the emphasis is on picking up a win-win arrangement, while for strategic connections the approach is aggressive. It is basic to record the correct terms of the arranged assention and mirrors these in the agreement. It is great practice to have a free officer check and sign the agreement. There ought to be a division between the individual marking the agreement and the individual who have everyday duty regarding contract administration. From a legally binding perspective, it is a general control in common and custom-based law nations that gatherings have authoritative flexibility. The purpose for the flexibility of agreement is singular self-rule and open advantage. The agreement is authoritative upon the gatherings and decides the rights and liabilities. (W. Flume, 1992)

Where an agreement adopts a milestone approach; payment to the provider can be attached to the satisfactory completion of every milestone. This approach allows for monitoring and tracking of progress against the costs by the project management teams.

A copy of the intended contract is sometimes attached to the invitation documents for the bid at the time of running the advertising. The tender document may set up a condition that suppliers state whether or not, they would be prepared to be bound by the terms and states of the agreement if successful (Alderman et al, 2007). The general objectives of the acquisition methodology, are both to locate the best answer for the undertaking's destinations (from a specialized and incentive for cash point of view), and to choose a capable firm or consortium to actualize that arrangement. This ordinarily requires a reasonable, aggressive, straightforward, and productive acquisition process. In any case, the best obtainment technique to accomplish these targets may rely upon the unique circumstance and the nature and limit of the administration establishments required, and in addition on the qualities of the specific venture.

Another imperative component in procurement is the Specification which is an arrangement of reported requirements to be fulfilled by a material, plan, item, or (ASTM International, 2012). The general motivation behind a detail is to give a premise to getting a decent or management that fulfill a specific need at a practical cost and to welcome most extreme sensible rivalry (Lloyd, 2004). Particular sets limits and along these lines conceivably wipes out things that are outside the limits drawn. Details ought to be refreshed on the premise of market substances, ought to be a piece of the offer reports, should precede the planning of offering records and ought to be set up by the individuals who recognize what is required or by an acquisition specialist or an expert in the event of complex determinations (PPOA, 2014).

In projects, the particular of necessities prompts the distinguishing proof of a deliverable or set of expectations. A deliverable is an unmistakable yield that must be given under the agreement (Ryan, 2005). In project contracts, expectations can be attached to points of reference. A point of reference is an estimation of advance toward a result. For a regular audit project, points of reference may be the culmination of survey and conveyance of a draft report, at that point amendment of draft report and conveyance of the last report. Where the idea of the obtainment is with the end goal that the association can characterize what the results are, however not really how they conveyed, limited offering

might be utilized as the offered welcome technique. This is the place execution is the driver and can be plainly explained.

Providers can offer distinctive imaginative arrangements, insofar as the execution meets the association needs (Brown et al, 2001). In examples where the providers must offer an answer that precisely coordinates the associations' detail, the association may utilize confined offering strategy like. Articulation of Interest through which providers are shortlisted trailed by an offering procedure. The choice as to which is most suitable shift contingent on the nature, scope, esteem, level of hazard and many-sided quality of the project (Baily, et al, 2005). The two primary offer welcome techniques utilized as a part of Kenya are open offering and limited offering.

Choosing a skilled contractual worker is a standout amongst the most vital assignments performed by acquisition boards of trustees while obtaining for project. Amid offer assessment, each offer must be precisely considered, on an equivalent premise, against the distributed assessment criteria. The procedure must take after the approach and system set out in the acquirement records. The assessment board must decide the best provider in view of the data gave by providers in their offer. The assessment should consider ability, limit and incentive for cash over the entire of-life of the acquirement. Due persistence ought to be utilized to confirm that the favored provider has the limit and ability to effectively convey against the predefined prerequisites Chua et al, (1997). Clear, brief and exhaustive notes are to be taken of all assessment board exchanges and discoveries. The acquisition capacity should keep a full record of how each offer was surveyed against the criteria and exhibit that each got due and reasonable thought. Where an offer is rejected the explanations behind the dismissal must identify with the assessment criteria, be reasonable, unmistakably clarified and recorded in composing.

After the Contract transaction in projects, a formal discourse between the gatherings associated with the task is held to achieve an understanding. It is tied in with achieving concurrence on the fundamental terms of the agreement. It incorporates a trade of offers, concessions and dealing. For synergistic connections the attention is on picking up a win-win arrangement, while for strategic connections the approach is focused. It is fundamental to record the correct terms of the arranged understanding and mirrors these

in the agreement. It is great practice to have an autonomous officer check and sign the agreement. There ought to be a partition between the individual marking the agreement and the individual who have everyday obligation regarding contract management. From a legally binding perspective, it is a general govern in common and precedent-based law nations that gatherings have authoritative flexibility. The purpose for the opportunity of agreement is singular self-governance and open advantage. The agreement is authoritative upon the gatherings and decides the rights and liabilities. (W. Flume, 1992)

Where an agreement embraces a point of reference approach; installment to the provider can be attached to the fruitful fulfillment of every development. This takes into consideration Management to be followed and observed against spending plan. Infrequently a duplicate of the planned contract is joined to the offered welcome reports at the season of promoting. It might be a state of the delicate that providers state whether or not, if effective, they would be set up to be bound by the terms and states of the agreement (Alderman et al, 2007). The general objectives of the obtainment methodology, are both to locate the best answer for the task's targets (from a specialized and incentive for cash point of view), and to choose a skilled firm or consortium to execute that arrangement. This commonly requires a reasonable, aggressive, straightforward, and productive obtainment process. In any case, the best acquirement system to accomplish these destinations may rely upon the specific situation and the nature and limit of the management foundations required, and additionally on the attributes of the specific undertaking.

2.4 Budgetary allocation and Management of Water Hyacinth

Financial plan is another basic factor that decides a task's advance and administration. In the event that the financial backing is high, at that point the quantity of days for culmination of the task is additionally more as is the quantity of assets assigned to it. Try not to surge in such circumstances; rather concentrate totally on conveying items or administrations that are of best quality, with most extreme use of assets. Be that as it may, if the financial backing is less you need to modify with confinements, for example, inaccessibility of assets, absence of time, and cash. Be that as it may, you can't trade off

on quality which implies the feeling of anxiety of you and your group increments. You may need to inspire your disturbed exhausted colleagues by empowering them for their great execution and perceiving their endeavors through rewards. Budgetary limitations influence each phase of the procedure Sullivan and Mayer, (2010). Absence of forthright spending scoring brings down, the level of consideration for the ventures and welcomes choices to be gone up against the premise of deft misuse of spending rules as opposed to assessments of longer-term dangers and prizes. The dangers and vulnerabilities escalate over the long haul, as tasks confront new difficulties and as spending plans turn out to be more burdened with money related responsibilities. In like manner, nations ought to be careful about utilizing private money to fund foundation and capital resources (OECD Journal on Budgeting Volume, 2009).

Gwadoya (2001), stated that money related assets for development activities ought to be evaluated practically at the season of getting ready for the task. While it is basic to get ready for venture execution together, assets for each capacity ought to be partitioned. Practically speaking, each venture ought to have two separate spending lines for instance the undertaking and for its observing and assessment concurred ahead of time with accomplices. Observing and assessment costs related with tasks can be distinguished moderately effectively and be charged direct to the specific venture spending plans with prior comprehension among accessories through joining in the project spending design or Annual Work Plan (AWP) set apart by assistants. Sourcing and securing monetary assets for development task or projects can represent extra difficulties.

Pace (1990), expressed that it is imperative to designate required assets for every development project. It is imperative that partners consider the assets required for auspicious consummation of tasks and concur on a commonsense course of action to back the related exercises. Such courses of action ought to be archived toward the start of the program to empower accomplices to move fundamental finances as per their strategies, which could take significant time and exertion.

Neale and Neale (1989), delineated the connection between venture cost and arranging contribution to the opportune culmination of development ventures. Basically, the accessibility of assets focused at a specific undertaking movement is a measure of project

success, particularly for exercises in the basic chain. In an examination to decide how District healing centers in Ghana adapt to the awkward arrival of assets, Asante et al. (2006) , noticed this made genuine income issues for the locale wellbeing chiefs that upset the Management of wellbeing exercises and dampened the area wellbeing staff. In any case, in light of their earlier information of when reserves were probably going to be discharged, locale wellbeing directors embrace a scope of casual instruments to adapt to the circumstance. These systems incorporate acquiring supplies on layaway, getting money inside, pre buying materials, and preserving some portion of the final quarter contributor pooled stores for the primary quarter of the following year. Despite the fact that these casual instruments have kept the area wellbeing framework in Ghana running even with tenacious deferrals in subsidizing, some of them are available to manhandle and could be a potential wellspring of defilement in the wellbeing framework. The awkward arrival of assets, especially amid the principal period of the task, is a huge obstruction to successful venture conveyance particularly where new undertaking staff must be enlisted and pre-essential field supplies obtained to commence venture exercises. The requirement for opportune arrivals of assets has likewise been focused on (Foster, 2000).

Monterio's (2010) contention of that the private accomplice needs "cash in question" keeping the end goal in mind to deal with the organization for execution and not only for benefit. It could however be contended that the correct motivating force components could secure proceeded with advancement and streamlining all through the agreement length, as the private accomplice would take a stab at bringing down the upkeep cost, yet not the quality and standard of support as this would bring about a diminishment in installments. One motivation behind why the private area invites Partnership with open back could be that the worldwide financial emergency has diminished access to fund and numerous extensive development organizations have encounters extraordinary loses in the most recent years.

2.5 Project Manager Competencies and Management of Water Hyacinth

Project management methods are additionally controlled by the difficulties looked by an undertaking director which, thusly, relies upon the sort of group he or she is taking care of. In the event that the group comprises of individuals with assorted foundations and aptitudes, a hole regarding solidarity may exist. This clearly impacts work. Consequently, an undertaking supervisor ought to apply procedures to bring the group close. He ought to guarantee that standard group meets happen which can be both formal and casual. In group gatherings and excursions individuals from different foundations will undoubtedly communicate. This makes a bond amongst individuals and they are prepared to be there for each other. There is developing acknowledgment that diverse sorts of activities require distinctive ways to deal with their management, requiring management methods custom fitted to the necessities of the task, (Crawford et al., 2005), and project directors chose with proper aptitudes, (Turner and Muller, 2006; Muller and Turner, (2007). Expanding globalization of tasks and undertaking management adds to this assorted blend, for project Managers making intercultural challenges, (Muller & Turner, 2004). Proficient affiliations are starting to perceive this broadening of undertaking management.

Be that as it may, while perceiving the requirement for various management approaches, the writing all around does not address whether distinctive achievement criteria are pertinent to various sorts of project, and whether they will perform diversely against these diverse achievement criteria. Wateridge (1995), proposes that in picking a task management system, the project support or undertaking supervisor ought to recognize the applicable achievement criteria, from them decide suitable achievement variables to build the possibility of making those progress criteria, and afterward select an undertaking management technique that conveys those achievement factors. Crawford et al. (2005), have built up an order framework for projects which they offer as distinguishing suitable strategies for projects, yet they offer no direction on whether diverse achievement criteria will be important for various sorts of tasks, and henceforth unique achievement factors, and whether distinctive activities will perform contrastingly against those distinctive achievement criteria.

Moreover, project supports, while choosing project chiefs to deal with their activities, need to realize that the supervisor will concentrate on the significant achievement criteria of the undertaking, and will be gifted in actualizing the proper achievement factors. Subsequently the support needs an undertaking chief not simply with fitting abilities, (Turner and Muller, 2006; Muller and Turner, (2007), yet in addition with suitable concentration for their work.

A Project manager needs to work with various offices associated with the task to appraise lead times so they address the issues of the basic chain (Goldratt, 1997). Reiss (1993), proposes that an undertaking is a human movement that accomplishes a reasonable goal against a period scale and that project management includes a blend of individuals management and management of progress.

Otieno (2007), contends that if appropriate evaluation and management of an undertaking is done a task would never neglect to be finished in time. Mulwa (2007), in his exploration of the effect of task pioneer and his/her initiative style on project achievement suggest that writing on project achievement factors has to a great extent overlooked the effect of the undertaking supervisor, and his or her management style and fitness, on project achievement. This might be on account of the vast majority of the investigations asked project administrators their feeling and the respondents did not give it due thought to their own effect on project achievement. Or, then again, it might be on account of the investigations have not measured the effect of the project chief and, subsequently, not recorded it. Or, on the other hand, it might be on the grounds that the project administrator has no effect. Nonetheless, that last conclusion is in guide differentiation to the general management writing, which hypothesizes that the initiative style and ability of the director has an immediate and quantifiable effect on the execution of the association or business. Along these lines, the creators have been appointed by the Project Management Institute to think about whether the initiative style and capability of the task chief is a win factor on projects and whether diverse styles are fitting on various sorts of undertakings.

Nearly everybody knows about projects saw as effective by those engaged with their Management, while the exceptionally same tasks have been ineffectively gotten by

clients Oser (1967). There are different undertakings that devoured extreme assets and were viewed as interior disappointments, yet were later hailed as effective by their clients and turn into a wellspring of income for the organization for a long time (Mwabu et. al., 2002).

The mix of a changing authoritative condition and changing task qualities make the part of the project pioneer troublesome Kerote (2007). Inside this condition, a skilled task chief is much of the time viewed as significantly affecting general project accomplishment and also being basic to other undertaking components, for example, the achievement of the task group, including colleague's inspiration and inventiveness Wanjiru (2005). This solid connection with progress guarantees that task chief skills are quite compelling.

The requirement for project management skill is all around archived. Kaklauskas, Amaratunga and Lill (2010) point out that "there is a developing familiarity with the connection between making project progress and development project chiefs' skills". As indicated by Crawford (2000), "the fitness of the project chief is in itself a factor in effective conveyance of tasks". This view is supported by Patanakul and Milosevic (2009) and furthermore by Stevenson and Starkweather (2010). Worsley (2009) found that associations still report challenges in the enlistment of undertaking chiefs with the fitting learning, abilities and experience fundamental for their present tasks and furthermore "that while capabilities may show the nearness of project management information, they are frequently poor indicators of general capacity".

Nwagbogwu (2011) infers that task achievement is never again seen inside the limits of meeting the project limitations of extension, time and cost; rather, it is a vital connection that associates the last item to the end-client's fulfillment focused at accomplishing the general undertaking objective (project

2.6 Community participation and Management of Water Hyacinth

Procedures of overseeing activities will differ contingent on the sort of partners for the undertakings. On the off chance that a task has numerous partners from various

foundations, there is a probability of contradiction between them. In such cases, venture administration turns out to be to a great degree testing as you can't bear to have troubled partners and customers. Awesome persuading and arrangement aptitudes are required in such cases to achieve an agreement. It can be tedious and henceforth the real time committed to assets will diminish. The task administrator needs to receive prudent methodologies in such cases and get the work done. Brager, Specht, and Torczyner (1987), characterized investment as a way to instruct nationals and to expand their skill. It is a vehicle for impacting choices that influence the lives of natives and a road for exchanging political power. Be that as it may, it can likewise be a strategy to coopt contradict, a system for guaranteeing the receptivity, affectability, and even responsibility of social administrations to the purchasers

The people group improvement approach underlines self improvement, the popularity based process, and neighborhood administration in group rejuvenation (Barker, 1991). Most people group improvement work includes the cooperation of the groups or recipients included (Smith, 1998). Along these lines, group interest is an imperative part of group advancement and mirrors a grassroots or base up way to deal with critical thinking

It is generally perceived that cooperation in government conspires frequently implies close to utilizing the administration offered or giving contributions to help the task (Smith, 1998). This is diverged from more grounded types of cooperation, including control over choices, needs, plans, and Management; or the unconstrained, instigated, or helped arrangement of gatherings to accomplish aggregate objectives .Arnstein, (1969); Cohen and Uphoff, (1980); Rifkin,(1990); WHO, (1991); Rahman, (1993); Smith, (1998).The most imperative and confounded issue bearing on nearby level arranging and advancement is group interest. Compelling people group cooperation may prompt social and individual strengthening, monetary improvement, and sociopolitical change (Kaufman and Alfonso, 1997). However there are impediments: the energy of focal administrations, the absence of neighborhood abilities and authoritative experience, social divisions, and the effect of national and transnational structures (Kaufman and Alfonso, 1997). There is no obvious assent in the writing of group advancement on the

idea of group investment or on a remedy to guarantee it. The requirement for group support being developed and administration is in any case acknowledged and perceived in the expert writing. Arnstein (1969), battles that subject support is resident power, however that there is a basic contrast between experiencing the vacant custom of interest and having the genuine power expected to influence the result of the procedure.

Including administrations clients and different partners straightforwardly in creating and observing a venture can enhance extend outline and execution. Amid the venture advancement stages, partner discussion is an imperative piece of the improvement procedure, permitting the worries of potential administration clients and others influenced by the task to be mulled over while organizing and actualizing venture .Planning for genuine activities in which groups are associated with intelligent reenactments of significant changes to administrations and can propose needs (Taylor, 1995).

Development of the nation states, in terms of physical, social, and legal infrastructure, for further economic development purposes, is the role of most governments. Partnership is about involving society and private actors in dealing with problems rather than doing them alone or privatizing it to the market. However, the complex nature of such partnerships raises serious concerns about transparency and public involvement (Bovaird, 2010); Hodge et al., 2010); Sagalyn, 2007).In the traditional model, a public service is contracted out to a private sector and the general public has a limited voice. Even in the more current practices where the public and private sectors have a formal contractual relationship, the connection with the general public is still an issue. Thus, the public interest is often sacrificed in public officials' trade off with rapid project Management (Krawchenko& Stoney, 2011) ; (Ng et al., 2012); (Sagalyn, 2007).

Cooperation in projects by individuals from the group has real focal points. It enables individuals to fabricate their abilities and recognize and possess the task. This prompts productivity and supportability. Kumar (2002), has distinguished various elements which he considers as advantages that accompany cooperation of individuals in a program. To begin with, he expresses that investment guarantees proficient usage of assets. Individuals cooperate towards accomplishing their targets. Second, individuals' interest

builds viability; activities can be settled inside the time plan; they can likewise do checking and assessment and draw an advance report.

However, one of the main reasons for project failure is ignoring the public interest. The purpose of the public-private partnerships is to contribute to the benefit of the broader community (CED, 1982). Therefore, in order to have a successful project with genuine partnership (Wettenhall, 2005) where all parties including the general public collaborate and benefit, as the National Council for Public-Private Partnerships in the United States (2013), recommends there should be an open communication with the affected portion of the public. Open communication helps the establishment of these partnerships through minimizing potential resistance. Public-decision making is an important process. It has been widely accepted that there are benefits in creating a process to ensure the quality of the decision-making.

Though, there has not seemed to be enough concern about including the perspective of the general public, especially in the decision-making of the early planning phases (Ng et al., 2012). For the purpose of gaining input on project objectives, there is a need for an ongoing meaningful consultation with stakeholders, including the general public, throughout the project process. Data disclosure and public engagement are the two important parts of this process to obtain public legitimacy. Still, in some types of project like DBFOs (Design-Build-Finance-Operate) private entities claim some level of confidentiality in order to maintain their intellectual property, especially during the competitive tendering process (Siemiatycki, 2007).

An anticipated basic leadership process, open access to key reports and information, reasonable open doors for partners to give contribution to the arrangement, and a straightforward and responsible arrangement of coordinating partners commitments into an official conclusions are qualities of an important discussion (Siemiatycki, 2009). Andersson (2008), contends that straightforwardness and open cooperation are emphatically connected. Straightforwardness needs open inclusion and important open association can't occur without straightforwardness in methods. Together, they are two of the significant building hinders for mindfulness and subsequently upgrading cognizant basic leadership.

In terms social components, people in general intrigue must be tried in light of variables, for example, adequacy, straightforwardness, value, free, customer rights, security, protection, and privileges of portrayal of affected people and groups (Duffield, 2010).

2.7 Communication Management and Management of Water Hyacinth

Cherry (1978) defined communication as the procedure of cooperation between people in which significance is made and shared. Dainty, et.al, (2006) have perceived that the expression "communication is in itself a diverse and complex term, which can mean distinctive things in distinctive setting and circumstances. This is positively the case inside the development business, where each task requests communication between wide assortments of members. There gives off an impression of being little vulnerability that communication accept a basic part in the ampleness of affiliations. Regardless of the way that bosses in different task endeavor grouped endeavors and activities, it has been seen that they contribute the lion's share of their vitality related with communication. Drucker (1985), stresses the centrality of communication for overseers, and points out that correspondence limit is basic for advance. In wander organization, the criticalness of correspondence is complemented by Sievert (1986), who observed that an abnormal state of the issues in working associations may be credited to poor correspondence.

Shutt (1992), express that it is the absence of early meeting and co-operation that has hampered communication and therefore failure of project communication. The researcher prepares a general diagram of customer prerequisites subsequent to doing possibility examines with alternate advisors and conveys it to whatever is left of the individuals from the outline group for aggregate activity. Great correspondence between project members is critical for venture success. Poor correspondence is a standout amongst the most widely recognized task dangers (Ceric, 2003; Zerjav and Ceric, 2009). Communication inside development projects is a multifaceted concept crossing various disciplinary fields, numerous association all levels, also a different perspectives and translations. Participants need to work together, share, gather, and coordinate noteworthy measures of data to acknowledge venture objectives(Emmitt and Gorse, 2007; Emmitt 2010).

In project management writing, correspondence involves a critical position (Cadle &Yeates, 2004); (Schelle, Ottmann; (Lee-Kelley and Sankey, 2008); (Maylor, 2003) and Pfeiffer, 2006). Be that as it may, most research ventures are centered around the investigation of correspondences between the undertaking group and the outside world, correspondence inside the task group appears to take a moment put.

Undertaking correspondence administration guarantees opportune and fitting age, accumulation, spread, stockpiling, and mien of venture data. Open and clear interchanges are required among organizers, implementers, and all levels of the association for venture achievement. It incorporates having a correspondence design, data dispersion way, advance detailing, and data sharing framework for administration and clients (Kwak&Ibbs, 2002). Undertaking correspondence administration ought to likewise incorporate strategies and systems to fabricate trust and connections among colleagues, and additionally engender attractive individual practices and clear correspondence rules.

Correspondence conveys a unique significance inside the business because of its venture based structure. Given that development is such a divided, dynamic and divergent segment, compelling correspondence ends up noticeably fundamental "for the fruitful conveyance of execution objectives efficiency, gainfulness and rehash working open doors" (Dainty et.al,2006).

2.8 Theoretical Framework

The research project was based on System theory and Situational Theory.

2.8.1 System Theory

A system is an element with interrelated and associated parts; it is characterized by its limits and it is more than the total of its parts (subsystem)The objective of frameworks hypothesis is methodically finding a framework's elements, requirements, conditions and illustrating standards (reason, measure, techniques, devices, and so on.) that can be perceived and connected to frameworks at each level of settling, and in each field for accomplishing streamlined equifinality (Beven, 2006).

The system theory has significantly affected management science and Understanding associations. A framework is an accumulation of part brought together to accomplish a general objective. On the off chance that one a player in the framework is evacuated, the nature of the framework is changed also. A framework can be taken a gander at as having inputs (e.g., assets, for example, crude materials, money, technologies, individuals), forms (e.g., arranging, sorting out, spurring, and controlling), yields (items or administrations) and results (e.g., enhanced quality of life or efficiency for clients/customers, profitability). Frameworks share criticism among each of these four parts of the framework. The Systems Theory may seem quite essential. However, many years of administration preparing and rehearses in the work environment have not taken after this hypothesis. Just as of late, with enormous changes confronting associations and how they work, have teachers and supervisors come to confront this better approach for taking a gander at things. The impact of system theory in management is that it causes chiefs to take a gander at the association all the more extensively. It has additionally empowered directors to translate examples and occasions in the work environment – i.e., by empowering supervisors to perceive the different parts of the association, and, specifically, the interrelations of the parts.

It is vital to perceive that numerous directors have utilized and will keep on using a frameworks approach and possibility sees naturally and certainly. Without much information of the hidden group of association hypothesis, they have a natural "feeling of the circumstance," are adaptable diagnosticians, and modify their activities and choices as needs be. In this way, frameworks ideas and possibility sees are not new. Notwithstanding, if this way to deal with association hypothesis and administration practice can be made more express, we can encourage better administration and more powerful associations.

The hypothesis gives straightforward devices, which permit watching conditions between elements action. Its most prominent worth is commitment to clarifying the instruments of rivalry and participation. The majority of the connections between substances are neither strict clashing nor strict helpful. Utilizing the wording of the amusement hypothesis, a large portion of the social associations are non-zero-total recreations, which mean

diversions between players whose interests aren't either absolutely inverse or completely cognizant. In different universes between players exist contention that does not avoid probability of participation. Non-zero-entirety diversion's answers are Nash balance – the circumstance where no player has anything to pick up by changing just his or her own methodology. On the off chance that every player has picked a procedure and no player can profit by changing his or her methodology while alternate players keep theirs unaltered, at that point the present arrangement of system decisions and the comparing settlements constitute Nash balance (Nash, 1950).

A number of studies has been done but mainly on collaboration by players in the construction. Douma, Bilderbeek, Idenburg and Looise (2000), investigated strategic alliances through collaborative relations and established that technological and access to new technologies, alliances have become a key success factor in many industries. This is as a result of the ever-increasing pace of technology. There is a shift from “conventional” cost driven” collaboration to skill-intensive alliances, where cross-partner learning was a major goal, Douma et al., (2000)

Successful collaborative mergers and strategic collaborations needed to be built as part of the overall game plan of the organization in the industry (in this case construction) This requires clear identification of plans, goals and objectives, and getting to select the right type and choice of ally, (Stiles 1985). Crouse (1991) ,further pointed out that the potentials of partnerships had crucial roles which should be clearly quantified by the benefits of a balanced relationship between the partners: partnerships provides the power to leverage internal investments; focus on core competencies; use center capabilities of different associations; diminish capital needs; widen item offerings; get entrance or speedier passage into new markets; share rare assets; spread hazard and opportunity; enhance quality and profitability; approach elective innovations; give rivalry to in-house engineers; utilize a bigger ability pool; and fulfill the client.

Collaborations require a commitment by the organization to willingly cooperate and work towards a common business goal (Bresnen and Marshall, 2000). Arditi and Chotibhongs (2005), investigated the issues in subcontracting practice. They also investigated individual issues rather than subcontracting practice in its totality. They established that

the lack of necessary knowledge hinders an effective use of this hybrid form of delivery. Management of state project isn't easy and may sometimes not achieve the desired objectives. However we can benefit more if we stop treating state and market as an alternative option for resolving societal challenges through of public resources.

2.8.2 Situation theory

The situational or contingency theory asserts that when managers make a decision, they must take into account all aspects of the current situation and act on those aspects that are key to the situation at hand. Fundamentally, the approach "it depends". For instance, on the off chance that one is driving troops in Iraq, an autocratic approach is most likely the best. In the event that one is driving a healing facility or University, a more participative and facilitative administration style is presumably best

Situational theory has been connected to numerous issue areas, most clearly to issues in philosophical semantics for which it was initially created. Different points to which situations semantics has been connected incorporate propositional demeanors (e.g., Barwise and Perry 1981, 1983, 1985; Devlin 1991a; Ginzburg 1993), structure of analogy (e.g., Mori and Nakagawa 1991), issues of etymological disambiguation and fractional data diversions (Parikh 1990, 2007), and regular dialect handling and others issues of computational phonetics (Rieger 1995), among numerous different subjects of intrigue. Additionally various researchers have connected situation semantics to dialect particular issues. These incorporate Japanese honorifics (Sugimura 1986), Japanese punctuation (Suzuki and Tutiya 1991), Iroquoian-etymological points of view (Zaefferer 1991), the semantics of Spanish past-tense verbs (Cipria and Craige 2000) and Turkish case markings (KIIIçaslan 2006).

It can be concluded that there is " no perfect way" or approach in administration or accomplishing tasks, different condition calls for different approaches to manage, handle, administer, and light up the developing issue concerned. Administration and association is an 'Open structure', which encounter issues or troubles occasionally, which requires 'flexible' and 'situational' course of action with a particular ultimate objective to overcome or deal with the issue or issue concerned.(Jeong Chun Hai @Ibrahim, and

NorFadzlinaNaw,2012). Other situational or possibility factors are 'changes in client interest for merchandise and ventures, change in government approach or law, change in condition or environmental change, et cetera.

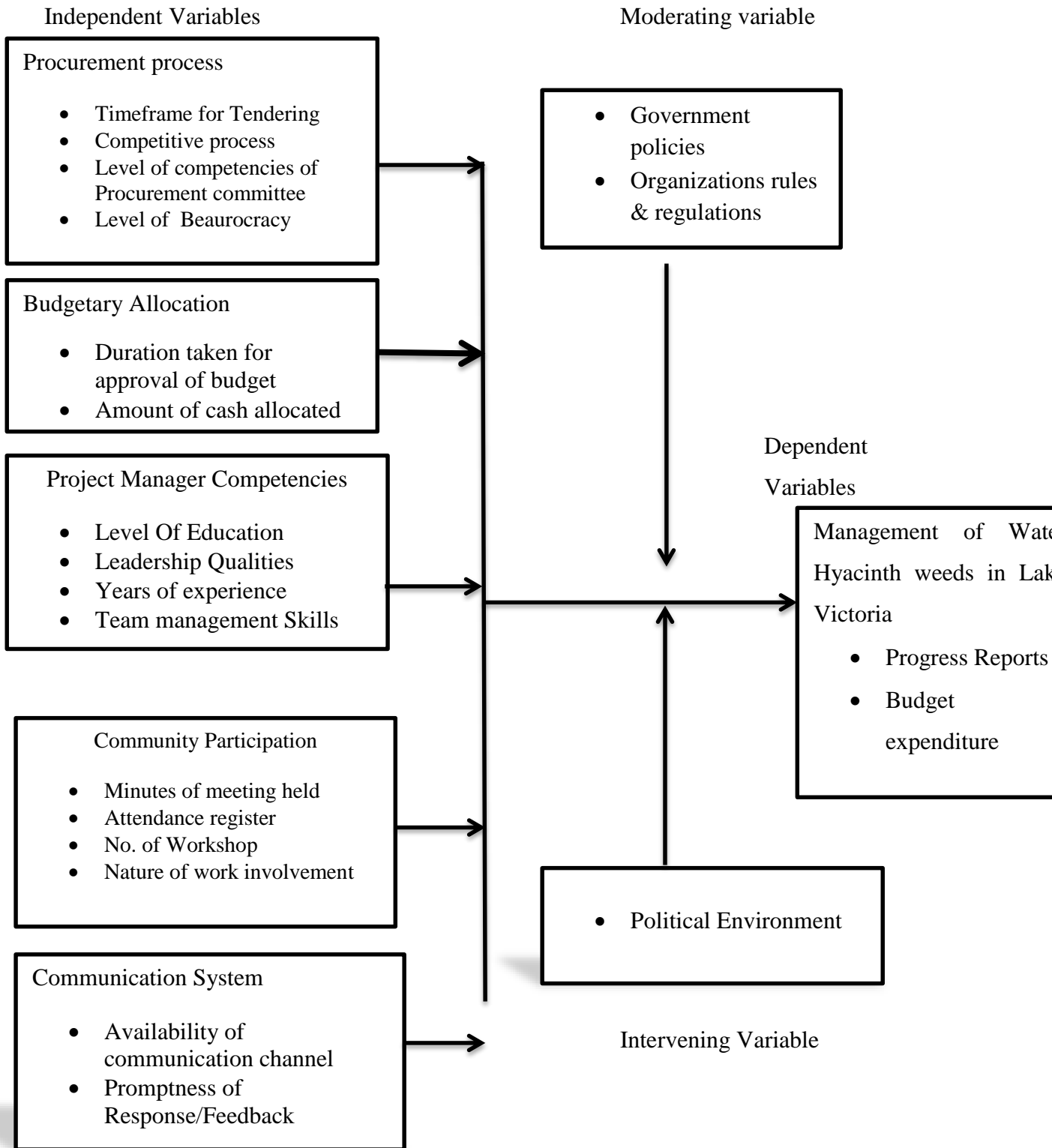
The situational theory or contingency theory affirms that when supervisors settle on a decision, they ought to consider all parts of the current condition and follow up on those perspectives that are basic to the present situation. Basically, the approach "it depends". For example, if one is driving troops in Iraq, an imperious style is likely best. If one is driving a mending focus or University, a more participative and facilitative expert style is apparently best

Situation theory has been connected to numerous issue spaces, most clearly to issues in philosophical phonetics for which it was initially created. Different subjects to which circumstance semantics has been connected incorporate propositional dispositions structure of allegory, issues of etymological disambiguation and halfway data recreations (Parikh 1990, 2007), and regular dialect handling and others issues of computational phonetics (Rieger 1995), among numerous different themes of intrigue. Likewise various researchers have connected circumstance semantics to dialect particular issues. These incorporate Japanese honorifics (Sugimura 1986), Japanese syntax (Suzuki and Tutiya 1991), Iroquoian-phonetic points of view (Zaefferer 1991), the Spanish past-tense verbs semantics (Cipria and Craige 2000) and Turkish case markings (KIIIçaslan 2006).

2.9 Conceptual Framework

This part provided a schematic presentation of the relationship between the variables under investigation.

Figure 1: Conceptual Framework



2.10 Research Gap

Given the developing interest in project management since the late 1990s Liet al., (2005), distinct areas of projects management have been investigated and examined; regions, for example, chance administration Shen et al., (2006), relationship administration, Akintoye et al., (1998); Abdul-Aziz, (2001); Chan et al., (2003); Smyth and Edkins, (2007), budgetary viabilities Bakatjan et al., (2003); Wibowo, (2004) and obtainment Ng et al., (2007); Ye and Tiong, (2003) have all been widely investigated by scientists around the world. In any case, the issues of components impacting the management of water hycinth not yet been misused.

One area of project management that has gotten much consideration from specialists in the past decade is project achievement factors. This was uncovered in a survey of undertaking research slant from 1998 to 2008 by Ke et al. (2009); also, Tang et al. (2010) paid attention to extend accomplishment as a noteworthy research zone which is important to analysts. The above signs display how analysts worldwide are occupied with investigating the most ideal methods for conveying ventures. In any case, there is presumably that this territory of undertaking would keep on being of awesome enthusiasm to analysts in future as task showcase continues developing and developing in different locales and parts (Chan et al., 2010).

2.11 Summary of the Literature

Management is a complex concept. There is no standard way of managing projects as there is no single sort of task. Management and items are the two key classifications of management in the market and the management strategy varies essentially for both. Inside every class, there are different assortments and again project management will depend upon the sort of item or administration being referred to., Thomas, et al (2008), express that the front-end of the task is at any rate as basic as the ensuing stages that arrangement with nitty gritty arranging and execution. "The best group can't beat a poor undertaking design" and activities began down the wrong way in the beginning times can prompt the most astounding venture disappointments. Morris (1998), correspondingly

contended that "The choices made at the early definition stages set the vital system inside which the venture hence created.

White and Fortune (2002), take note that reasonable objectives and destinations and sensible calendar were the elements characterized in the arranging stage. Blomquist, Hällgren, Nilsson and Söderholm (2010) ,state "Plans are a foundation of any task; subsequently, arranging is a predominant action inside an undertaking setting." This is a repeating subject: activities and venture administration are tied in with arranging and controlling to guarantee effective task expectations. Arranging is innately essential to extend achievement or one could contend venture administration would not exist. Pinto and Prescott, (1990) in an original report found that that when inside measures of venture productivity are contrasted with basic achievement factors, arranging is seen to be of high significance at the underlying stages however is overwhelmed by strategic issues. Be that as it may, for outside progress measures or general task achievement, arranging factors overwhelm all through the venture

Dvir, Raz and Shenhar (2003), noticed the connection between's parts of the arranging stage and project success. The planning methodology exertion is less imperative to extend accomplishment than characterizing practical and specialized necessities of the project. He found out that "There exists a significant correlation between project success on one hand and the amount of effort invested in defining the goals of the project and the functional requirements and technical specifications of the product on the other hand.

They presumed that there was a connection between project management execution and task achievement. In this way it was clear from the prevalence of the writing that we can report: What gives off an impression of being clear is that exercises which we characterize as a feature of the planning stage, for example, prerequisites definition, scope definition and specialized examinations are important for project success, (Shenhar et al 2002).

Management is a complicated idea. There is no standard rule for overseeing projects as there is no single kind of undertaking. Managements and items are the two key classifications of offerings in the market and the management technique contrasts

fundamentally for both. Inside every classification, there are numerous assortments and again project management will fluctuate contingent upon the kind of item or management being referred to. Thomas, et al (2008),state that the front-end of the undertaking is at any rate as basic as the resulting stages that arrangement with point by point arranging and execution. "The best group can't conquer a poor project design" and tasks began down the wrong way in the beginning times can prompt the most astounding undertaking disappointments. Morris (1998), correspondingly contended that "The choices made at the early definition stages set the key system inside which the project along these lines created.

White and Fortune (2002), noted that unmistakable objectives and targets and reasonable timelines were the elements characterized in the planning phase. Blomquist, Hällgren, Nilsson and Söderholm (2010) ,state "Plans are a foundation of any undertaking; thus, planning is an overwhelming movement inside a project setting." This is a rehashing subject: exercises and errand administration are tied in with orchestrating and controlling to ensure viable endeavor desires. Arranging is intrinsically basic to broaden accomplishment or one could battle extend administration would not exist Pinto and Prescott, (1990) in a major report found that that when inside measures of undertaking profitability are appeared differently in relation to fundamental accomplishment factors, arranging supposedly is of high criticalness at the basic stages however is overpowered by key issues. In any case, for outside advance measures or general undertaking accomplishment, organizing factors charge all through the assignment

Dvir, Raz and Shenhar (2003), noted the connection between's parts of the arranging stage and undertaking achievement. The planning strategies exertion is less critical to extend accomplishment than characterizing useful and specialized prerequisites of the project. He inferred that "There is a huge positive connection between the measure of exertion put resources into characterizing the objectives of the undertaking and the practical prerequisites and specialized details of the item on one hand, and task accomplishment on the other". Furthermore, no sensible exertion ought to be saved beginning times of a project to legitimately characterize the undertaking objectives and prerequisites

They inferred that there was a connection between project Management exertion and task achievement. Accordingly it was clear from the dominance of the writing that we can report: What has all the earmarks of being clear is that exercises which we characterize as a component of the arranging stage, for example, prerequisites definition, scope definition and specialized examinations are essential to extend achievement, (Shenhar et al 2002).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the research design, population and sampling design, data collection methodology, validity and reliability of instruments, research procedures, method of data analysis and considerations of ethical concerns.

3.2 Research Design

A research design is the outline for directing the examination that expands control over components that could meddle with the legitimacy of the discoveries. Designing a study helps the scientist to plan and actualize the examination in a way that helped the analyst to get expected outcomes, along these lines expanding the odds of getting data that could be related with the genuine circumstance (Burns and Grove 2001).

A descriptive survey design was used in this study. As indicated by Gay (1981), a descriptive study is a procedure of gathering information with a specific end goal to test theory or to find answers to the problems of momentum status of the subject under investigation. Borge and Gall (1989), expressed that clear review plans are utilized as a part of preparatory and exploratory examinations to enable specialists to assemble data, condense, introduce and decipher with the end goal of illumination. This design is preferred in this research because it gives a point by point portrayal of the elements affecting the management of water hyacinth weed in lake Victoria, Kisumu County.

3.3 Target population

AN entire set of respondents that meet the designated set of criteria is known as a target population (Burns & Grove 1997). In this research the target population were all the residents within Kisumu town West constituency, south west ward which comprises of Fishermen, community, county council fish traders, Community elders along the shores within Kisumu sea port locality and Project team members at Kisumu Sea Port .

Table 3.1 Target population

Respondents	Target Population
Community Elders	10
Fishermen	50
City Council Fish Traders	50
Project Team Member	20
Total	130

Source (Kisumu sea port project office, 2017)

3.4 Sample Size and Sampling Techniques

Sampling is connected with the determination of a subset of people from inside a populace to gauge the qualities of entire populace. The key benefits of sampling are that there are possibilities of faster information gathering and lower cost, Kish (1965), Robert (2004). Each observation measures at least one properties of recognizable subjects recognized as autonomous people.

3.4.1 Sample Size

Sample size is the number of perceptions in a sample, Evans et al. (2000). It's an imperative component of any survey study in which the objective is to make deductions about a population from a sample. Practice has shown that, the sample size used as a part of a study is determined by the cost of information gathering and the availability of adequate measurable power.

The sample size was arrived at using Nassiuma, 2000 formula below that the research believed would generate sample large enough to reduce on random sampling error.

$$n = \frac{Nc^2}{C^2 + (N-1)e^2} = \frac{Nx0.52}{0.5^2 + (N-1)0.05^2}$$

Where

n is the sample size

N is the population (10 for community Elders, Fishermen, 50, City council Fish Traders 50 and 20 Project team members.

C is the Coefficient of variation (0.5)

e is margin of error (0.05)

(Nassiuma, 2000)

The figures of the sample population applied upon each of the four categories in the Ratio of their totals under each category to determine their respective allocations. Stratified Sampling then applied to select the respondents. The population, *N*, being 10 for Community Elders generated a sample of 9 in that category, 50 for Fishermen generated a sample of 33 under that category, 50 for City council Fish Traders generated a sample of 33 and 20 project team member generated a sample of 16 in that category as presented in table 3.2

Table 3.2 Distribution of the Sample Size

Respondents	Target Population	Sample Size
Community Elders	10	9
Fishermen	50	33
City Council Fish Traders	50	33
Project Team Member	20	16
Total	130	91

3.4.2 Sampling Techniques

. Due to the fact that the study involved Fishermen, City Council Fish traders, Project team and community Elders as the study population, stratified and purposive sampling techniques was used.

This is the technique for the determination of respondents on which data are to be made as has been portrayed in writing Kish (1965), Gupta and Kapoor (1970). It is concerned about the choice of a subset of individual items from a population to be representative of the population. Sampling is widely used for gathering information about a target population. Stratified and purposive sampling procedures was used in this study because of the way that the examination included Fishermen, City Council Fish dealers, Project group and group Elders as the investigation populace, stratified and purposive testing procedures was utilized.

Stratified sampling technique was an appropriate technique because it ensures that all individuals in each category within the target population has an equal chance of being included in the samples that would yield data that would be generalized within margin of error that can be determined statistically Borg, 1987; Mugenda and Mugenda, (2003). Purposive sampling is a method in which elements are chosen based on purpose of the study. It may involve the studying of the entire population of some limited group or a subset of a population.

3.5 Data collection Instruments and procedure

According to Mugenda (2003), research instruments are the means by which primary data is collected. The study being a descriptive survey used of the instruments that apply to social sciences. This study in particular used questionnaires and interviews. Closed ended questions, accompanied by a list of all possible alternatives for the respondents to select answers that best describes their situation were used. In order to reinforce and confirm the responses given by the respondents, the researcher will interview: The Fishermen, Fish traders, Community along the Lake Region project managers and project.

According to Gauthier (1979), the survey fills in as a fundamental correspondence implies between the scientist and the respondents. Selltiz (1977) expressed that the questionnaire that have an opportunity to return are those of appealing introduction, short, clear and simple to fill. Questionnaires are also more advantageous; and they can be controlled and administered to a large number of respondents simultaneously, (Tuckman, 1999). In view of these thoughts, the analyst developed a questionnaire after fundamentally inspecting questionnaires utilized by other different researchers with related studies. The surveys involved both closed and open ended questions.

3.5.1 Pilot Testing Instruments

The researcher issued out the questionnaires to nine respondents purposefully sampled before the real information collection practice is done in an attempt to tests the validity of the guidelines to be measured by whether every one of the respondents in the pilot test can take after the bearings as showed. It additionally gave better data on whether the sort of review is viable in satisfying the reason for the investigation.

3.5.2 Validity of the Instrument

Validity is the degree to which an idea conclusion or estimation is all around established and compares precisely to this actual reality, (Brains, Willnat, Manheim, Rich, 2011). According to Kothari (2004), validity can be dictated by utilizing a leading body of specialists who may judge how well the measuring instrument meets the benchmarks. There are a wide range of sorts of validity; Construct legitimacy which as indicated by Brown, (1996) is how much a test measures what it claims, or implies, to quantify. It is the suitability of inference made on the basis of objective facts or estimations (frequently test scores), particularly whether a test measures the proposed build. Another kind of Validity is the content validity (also known as logical validity) , which alludes to the degree to which a measure speaks to all features of a given develop lastly the Face legitimacy which is the degree to which a test is subjectively seen as covering the idea it implies to measure. As indicated by Holden, Ronald, (2010) ,face Validity alludes to the straight forwardness or significance of a test as it seems to test participants.

The researcher ensured that the instrument is valid with the help of the supervisor and research expertise

3.5.3 Reliability of the Instrument

Salinger and Shohamy, (1989) defined reliability as the degree to which information accumulation systems and instruments are predictable and precise. Unwavering quality of a measure demonstrates the degree to which it is without inclination and subsequently guarantees reliable estimation crosswise over time and over the different things in the instrument (Sekaran, 2006). Dependability is expanded by including numerous comparable things on a measure, by testing an assorted specimen of people and by utilizing uniform testing techniques. An instrument is said to be dependable if measures what should gauge. Reliability of instruments can simply be understood to refer to the degree to which a research instrument yielded consistent results in repeated trials. Lokesh, (1992), defines reliability as the ability of data collection tools or instruments to yield same results when repeated measurements are conducted under same conditions to test reliability,

For this study, the researcher employed test-retest type of reliability to 9 respondent which is 10% of the sample size of 91 in order to measure the reliability level of the research and Cronbach statistical tool to test the reliability; this was achieved through a pilot study conducted before the actual research to keep an eye on the quality of the questionnaire in gathering the data. The findings of the pilot test showed that community participation scale had a Cronbach's reliability alpha of 0.705, Procurement procedure had a scale had an alpha value of 0.725, Budgetary allocation scale had an Alpha value of 0.713, and Project Manager Competencies had an Alpha value of 0.725, Community Participation had an Alpha value of 0.710 and Communication Management had an Alpha value of 0.702 . This implies that the pilot test showed that the scales measuring the objectives met the reliability criteria ($\alpha > 0.6$). According to Mugenda & Mugenda, (2003) coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability. This therefore indicated that the research tool was sufficiently reliable.

3.6 Data Analysis procedure

Data analysis according to Orodho (2003) is the process of systematically and efficiently arranging and organizing documented material, information and different materials acquired from the field with the aim of expanding one's own particular comprehension and to empower one to present them to others. Before the analysis, information was cleaned by checking for consistency. Superfluous information contained in the data was disposed of. Coding was done by changing responses to numerical data. The information gathered was examined utilizing both subjective and quantitative techniques for examination. The quantitative information was examined utilizing clear insights where the reactions from the Questionnaires counted, organized and broke down utilizing rates, frequencies and weighted mean using Statistical Package for Social Sciences (SPSS) which as indicated by Martin and Acuna (2002), can deal with huge of measures of information and is productive in light of its wide range of factual strategies purposively intended for sociologies.

3.7 Ethical Issues

These issues were adhered to by ensuring that Participants are fully informed regarding the objectives of the study so as to be reassured that their answers were regarded as secret and utilized just for scholarly purposes and just for the reasons for this specific research. No any form of coercion or incentive was used to in order to influence respondents to give out the information regarding the research. Also All participants were given equal attention and treatment and those who may not understand the language used in questionnaire translation may be offered.

3.8 Operationalization of Variables

Table 3.3 Operationalization of Variable

Research Objective	Variable	Indicator	Scale	Data collection	Data Analysis technique

To explore the Influence of Procurement procedures in the Management of Water Hyacinth weed in Lake Victoria	Procurement procedures	Availability of adverts , Procurement Committee, Signed tender document	Nominal, Interval	questionnaire	Descriptive , qualitative,
To ascertain the Influence of Budget allocation in the Management of Water Hyacinth weed in Lake Victoria	Budget allocation	Approved budget /funds, Bank Statement, Funds allocated	Nominal, Ratio , Interval	questionnaire	Descriptive , qualitative, quantitative
To determine the Influence of Project Manager competencies in the Management of Water Hyacinth weed in Lake Victoria	of Project Manager competencies	Academic certificates Work experience records Progress reports	Nominal, Interval	questionnaire	Descriptive , qualitative,
To know the effectiveness of community participation in the Management of Water Hyacinth weed in Lake Victoria	community participation	Minutes of meeting held Attendance	Nominal, Interval	Questionnaire	Descriptive , Qualitative

		register			
To establish the Influence of communication system in the Management of Water Hyacith weed in Lake Victoria	communicati on system	Availability of communication channel, Promptness of Response/Feedba ck	Nomina l, Interval	questionn aire	Descriptive , Qualitative
Management of Water Hyacith weed in Lake Victoria	Independent	Progress Reports, Budget expenditure Level of work accomplished	Nomina l, Interval	questionn aire	Descriptive , Qualitative

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter comprised analysis of data, interpretation and presentation of the findings. The data presented includes background information of the respondents, response rate and a presentation of findings against each objective of the study. The data presented was analyzed based on the responses to the items in the schedules of the questionnaires.

4.2 Questionnaire return rate

In the research conducted a total of 91 questionnaires were issued out being 9 to community Elders 33 to Fishermen,33 to County Fish traders and 16 to Project Team members .Out of the questionnaires issued, 7 were successfully responded to by community Elders representing 10%, 28 were successfully responded to by the Fishermen representing 38% and 25 were successfully responded to by the County fish Traders representing 34% and 13 were successfully responded to by the Project Team members representing 18% of the total response. In Overall, a total of 73 questionnaires were successfully responded which translated to 80% of the sample taken. It is generally accepted that a response rate of over 60% is statistically representative in descriptive surveys (Partin, 1996). In view of the response the researcher had representative data to proceed with the analysis of the findings.

4.3 Respondents Demographics

As part of the general information, the respondents were requested to indicate their gender, age, the kind of stakeholders they are In Kisumu sea port project and the level of education. This was necessary in understanding the characteristics of the respondents.

4.3.1 Composition of the respondents

The research applied a stratified sampling technique on the critical stakeholders in the field of study which included Community Elders, Fishermen, County fish traders and Project team. The research believed that the sample drawn from individuals whose level of exposure to Kisumu seaport Operation was sufficient to provide the required responses to draw informed conclusion on the study. Characteristics taken in this section included gender, age, benefits of Kisumu sea port operations and the level of education as indicated in the Table 4.1

Table 4.1 Composition of Respondents

Composition of Respondents	Frequency	Percentages (%)
Community Elders	7	10
Fishermen	28	38
City Council Fish Traders	25	34
Project Team Member	13	18
Total	73	100

The Study shows that majority of the respondents were Fishermen 38%, followed by City Council fish traders with 34%. Project Team managers responded with 18% and finally the Community Elders with 10%. The result shows that the response received was dependent on the targeted population in that, the higher the targeted population, the higher the response received.

4.3.2 Gender Distribution

The study also sought to establish gender of the respondents and the results were as shown in the table 4.2

Table 4.2 Gender Distribution

Gender	Frequency	Percentages (%)
Male	43	59
Female	30	41
Total	73	100

The result shows that among the respondents 59% were males while 41% were females. Male therefore constituted the majority of the respondents who filled and returned the questionnaires. This was due to the targeted strata (Community Elders which mostly are constituted by male), nature of roles and responsibilities assigned to the target group of either gender with more Males involved in fishing activities while females mostly take in fish trade.

4.3.3 Age of the Respondence

The study sought to establish the age of the response and the results was as shown in the table 4.3

Table 4.3 Age of the Respondence

Age in years	Frequency	Percentages (%)
< 25	10	14
26-35	22	30
>35	41	56
Total	73	100

The responses received indicated that 10 (14%) of the respondents were below the age of 25 years, 22 (30%) were between 26 -35 years and 41 (56%) were over the age of 35

years. The majorities of the respondents were therefore in the age bracket of 36 and above years and closely followed by those in the 26-35 years. This was an indication that majority of the respondents of the Age 22-35 and 35 years and above had an experience in the Kisumu sea port activities and Public private partnership matters.

4.3.4 Benefit from Kisumu Sea Port Operations

The study also sought to find out what benefit the residents have gained from the Kisumu sea port and the results was as shown in the table 4.4

Table 4.4 Benefit from Kisumu Sea Port Operations

Years of benefit	Frequency	Percentages (%)
<10	38	52
>20	35	48
Total	73	100

The result indicated that majority of respondents have benefitted from the Kisumu sea Port operation with 38(52%) benefitting for 10 years and 35 (48%) benefitting for over 20years.This implied that the Lake had been the major source of income to the Kisumu town west residents.

4.3.5 Academic Qualifications of the Respondents

The study sought to establish the academic qualifications of the respondents and the findings was as the table 4.5

Table 4.5 Academic Qualification

Academic Qualification	Frequency	Percentages (%)
O-Level Certificate	20	27
Certificate	13	18

Diploma	20	27
Undergraduate	14	19
Post-graduate	6	9
Total	73	100

From the findings, the majority of the respondents were O-Level and Diploma holders each accounting for 27% (20), Certificate holders accounting for 18% (13), while Bachelor's Degree holders were 14 representing 19% of the respondents. Those with Masters Degrees 6 added up 9% of the respondents. This shows that majority of the respondents had qualifications above the normal basics education and that more had O level certificate and Diploma as compared to Bachelor's and Master's degree maybe because of the grades achieved in O-Level or lack of financial capability to move to the next level.

4.3.6 Public Private Partnership

The study sought to find out the Importance of Management of Water hyacinth Project in Kisumu County and the findings was as the table 4.6

Table 4.6 Importance of Management of Water Hyacinth Weed in Lake Victoria, Kisumu County

Importance of Management of Water Hyacinth Weed	Frequency	Percentages (%)
Yes	69	95
No	4	5
Total	73	100

The result from the table indicated that majority of the respondent felt that the management of water hyacinth was important to the communities of Kisumu County at 95% and they were more than willing to give full support the management activities so as to see the entire county grow economically and improve the standard of living to the

people in the entire region. However, 5% were of the different opinion the management of water hyacinth was not of importance to communities of Kisumu County. This Implied that majority of the respondents understands the benefits of managing the weed to the community and a country at large.

4.3.6.2 Kinds of financiers that are usually interested in Management of Projects

The study establish the Kind of financiers usually interested in Management of Project and the results was as presented in the table 4.7

Table 4.7 Kinds of financiers usually interested in Management of Projects

Kinds of financiers	Frequency	Percentages (%)
NGO	29	40
Bank	7	10
Donors	37	50
Total	73	100

The result revealed that project Management is normally undertaken as a collective responsibility of every member of the community though 50% of the respondents were of the opinion that most of the Projects are likely financiers to be financed by Donors, 40% asserted that NGOs also fund the project as shown on the graph above and finally 10% of result indicated that Banks would also be interested in financing project. This implied that different financier have different motivation factor behind their participation in the Project. For instance Donors have the passion of supporting development that makes a particular country grow both economically and socially as compared to the banks whose motivational factor are mainly to make profit.

4.3.5 Extent at which of the following factors influence the Management of Water Hyacinth weed in Kisumu sea Port projects

The result to the extent at which Environment, Political, Cultural and Social economic factors was as indicated in the Table 4.8

Table 4.8: Factors influencing the Management of Water Hyacinth weed in Kisumu sea Port projects

The Level of influence Deviation	n	Mean	Standard
Environmental factors 3.37	73	3.47	
Political factors 4.42	73	3.82	
Cultural factors 3.38	73	3.47	
Social-economic factors 3.98	73	2.88	

From table 4.8 above, the result indicated that Political factor had a high influence in the Management of Water hyacinth weed in Kisumu sea ports with a mean of 3.82 compared to Social –economic factors which had a low influence on the Project with a mean of 2.88. This implied that political factors may be playing a big role in influencing development in Kisumu sea port compared to social –economic factors which have a minimal mean grade justifying the minimal level of influence in the project Management.

4.4 Procurement Procedure in the Management of Water Hyacith weed .

The Study sought to determine the Influence of Procurement Procedures in the Management of Water Hyacinth weed and the results was as indicated in the Table 4.9;

Table 4.9: Procurement Procedures in the Management of Water Hyacinth weed

Procurement Procedures Deviation	n	Mean	Standard
Time frame	73	3.25	.89
Minimum Bidders	73	3.44	.88
Competency in the Committee	73	4.08	.85
Bureaucracy	73	4.41	.84
Experts to evaluate	73	3.10	.89
Competitive Procurement	73	3.51	.88
Responsive Bidders	733	3.63	.87

The study revealed bureaucracy in the Procurement Procedure influenced the Management of Project a high mean of 4.41. This was seconded by a majority with a mean of 4.08 indicating that competency level in the procurement procedures is also key to the project Management. However, minority of the respondents with a mean of 3.10 felt that experts carrying out the evaluation were not of a great influence to the Project Management seconded by small number of respondents who indicated that Time frame for tendering process has minimum influence in the project Management with a mean of 3.25. This implied that bureaucracy and competencies of the committee are the major factors in the procurement procedures that influence the management of Water hyacinth weed Project compared to expertise in the evaluation and timeframe set to carry out procurement procedures.

4.5 Budgetary allocation in the Management of public private partnership project

The Study sought to examine the Influence Budgetary allocation in the Management of Water hyacinth weed Project and the findings was as indicated in the Table 4.10

Table 4.10: Budgetary allocation in the Management of Water Hyacinth Weed

The Level of influence	n	Mean	Standard
			Deviation

Budgetary allocation

Duration taken to approve the Budget .87	73	3.95
Appropriate and effective budget .84	73	4.42
Utilized according to the plan .95	73	1.51
Realistically estimated .84	73	4.37
Budget allocation leads to successful project .87	73	3.78
Corruption affects the Budget .85	73	4.27

Opinion on project manager competencies in Management of water hyacinth weed project	Strongly Disagree F (%)	Disagree F (%)	Neutral F (%)	Agree F (%)	Strongly Agree F (%)	n	Mean	SD
The number of years of experience shows the capability of the project team to deliver on projects	9 (12%)	5 (7%)	5 (7%)	42 (57%)	12 (17%)	73	3.59	.87
Project manager level of education shows his/her competency.	5 (7%)	37 (51%)	2 (32%)	23 (5%)	6 (8%)	73	2.83	.91
A project manager need to have management skills in order to carry out projects	2 (3%)	7 (10%)	14 (19%)	40 (55%)	10 (14%)	73	3.67	.87
Leadership an important	5	3	7	24	34	73	4.08	.85

tool for project managers to manage the projects	(7%)	(4%)	(10%)	(33%)	(47%)			
Project managers frequently monitors the progress on the project activities hence should advice on the necessary actions to be taken by the stakeholders	4 (5%)	5 (7%)	6 (8%)	50 (68%)	8 (11%)	73	3.72	.87
Project manager need to have different leadership styles in order to deliver on projects	2 (3%)	2 (3%)	5 (7%)	43 (59%)	11 (15%)	73	3.40	.80
Project manager need to ensure that the projects are delivered on time as per the schedule	1 (1%)	3 (4%)	5 (7%)	28 (38%)	37 (51%)	73	4.37	.85
Interpersonal skills is key to managers in order to manage a project team	5 (6%)	8 (11%)	3 (4%)	8 (11%)	50 (68%)	73	4.27	.85

The opinion regarding budgetary allocation in the Management of water hyacinth weed is very important .The study revealed that appropriate and effective budget was key with a mean of 4.42, followed by the opinion that the estimated budget also should be realistic with a mean grade of 4.37 and finally more respondent with a mean of 4.27 indicated that corruption also affects the budget which will further influence the Management of the hyacinth weed project. However at an average of 1.51 indicated that the budgetary allocations are normally utilized as per the plan and an average of 3.78 indicated that Budget allocation leads to successful of the Project. This implied that appropriate and effective budget is of more importance to project Management.

4.6 Project Manager Competencies in the Management of Water Hyacinth weed

The Study sought to determine the Influence of Project Manager Competencies in the Management of Water hyacinth weed and the results was as indicated in the Table 4.11

Table 4.11: Project Manager Competencies in the Management of water hyacinth weed

The results indicated that the project manager competency in the Management of public private partnership project is important. A higher mean of 4.37 of the respondents confirmed that is the role of the Project Manager is to ensure that projects are delivered on time as per the schedule and a high mean of 4.27 of the respondents also affirmed that interpersonal skill of a project manager is key in managing a project team. Nonetheless, an average of 2.83 affirmed that the level of education does not necessarily show the level of competency of the Project Manager. This implied that project Managers should possess at least qualities of both a manager and a leader in order to deliver because the overall responsibility lies in the leadership which is the project manager.

4.7 Community Participation in the Management of water hyacinth weed

The Study sought to know the effectiveness of Community Participation in the management of water hyacinth weed project and the findings was as indicated in the Table 4.12;

Table 4.12: Community Participation in the Management of water hyacinth weed.

Community Participation in the Management of water Hyacinth weed	Strongly Disagree F (%)	Disagree F (%)	Neutral F (%)	Agree F (%)	Strongly Agree F (%)	n	Mean	SD
Project team must hold meetings frequently with the community in order to give feedback on the progression of the project.	3(10%)	7(10%)	17(23%)	30(41%)	16(22%)	73	3.67	.87

The community should be involved in a specific nature of work within the project	21 (29%)	18 (25%)	8(31%)	12(16%)	14(19%)	73	2.73	.91
There should be a specific number of workshop to be held with the community members	7(10%)	24(33%)	2(3%)	30(41%)	10(14%)	73	3.16	.89
Community members should be given a chance to Exercise control over resources	0(0%)	4(5%)	7(10%)	19(26%)	43(59%)	73	4.39	.84
Community members has the power to be part of project Management	6(8%)	5(7%)	3(4%)	13(18%)	46(63%)	73	4.21	.85
Community members must be part of the Management team in the project	0(0%)	0(0%)	3(4%)	10(14%)	60(82%)	73	4.78	.82
Members of the community must be involved in Making of decisions in relation to the	0(0%)	3(4%)	2(3%)	5(7%)	63(86%)	73	4.75	.82

project.								
Community participation is key to project success	0(0%)	0(0%)	3(4%)	10(14%)	60(82%)	73	4.78	.82
Failure to involve the community in the project affects them negatively.	0(0%)	0(0%)	3(4%)	9(13%)	61(84%)	73	4.79	.82
All projects can be sustainable through community involvement.	2(3%)	6(8%)	5(7%)	28(38%)	32(44%)	73	4.12	.85

Opinion on communication management in Management of water hyacinth weed Project	Very low extent F(%)	Low extent F (%)	Neutral F (%)	Great extent F (%)	Very Great extent F (%)	n	Mean	SD
Communication failure in and outside the project leads to project failure.	5(7%)	6(8%)	16(22%)	39(53%)	7(10%)	73	3.51	.88
Efficient and effective communication leads to detections of errors /problems within the project.	2(3%)	5(7%)	5(7%)	14(19%)	47(64%)	73	4.36	.84
Communication is key in project Management	6(8%)	13(18%)	34(47%)	12(16%)	8(11%)	73	3.04	.86

Both Horizontal and vertical communication is important in project Management	3 (4%)	2(3%)	8(11%)	40(55%)	20(27)	73	3.99	.86
Records of communication should be kept in all stages of Project	0(0%)	3(4%)	11(15%)	50(68%)	9(12%)	73	3.89	.86
Feedback from all parties on the project should be encouraged.	2(3%)	3(4%)	17(23%)	42(58%)	9(12%)	73	3.73	.86
Communication means/channel should be flexible enough to ease project Management	7(10%)	10(14%)	13(18%)	29(39%)	14(19%)	73	3.45	.88

Community participation is a central element, from a project’s conception to its management. This study strongly indicated that failure to involve community in the project could lead to a negative influence with a mean of 4.79. In addition, a mean of 4.78 of the respondents indicated that community members must be part of the Management team in the project and that community participation is key to project success. However, minimum number of the respondent with a mean of 2.73 indicated that community should not be involved in specific nature of work within the project. This implied that community forms part and parcel of projects therefore should be involved from the conceptualization phase of the project.

4.8 Communication management in the management of water hyacinth weed

The Study sought to establish the Influence of Communication Management in the management of water hyacinth weed and the findings was as indicated in the Table 4.13

Table 4.13: Communication management in the Management of water hyacinth weed

The result clearly demonstrated that efficient and effective communication leads to error and problem detection within the project by a mean a high mean of 4.36 of the respondents. This was with a mean of 3.99 indicating that both horizontal and vertical communication from all parties to the projects should be encouraged. However respondent with low mean of 3.04 were of the Opinion that communication is key factor

to project Management. In general, the study shows that effective communication and feedback is of important in the project lifecycle, this is because through communication all the issue of concern can be adequately addressed.

4.3.11 Influence of the Management of water hyacinth weed on the livelihood of Kisumu county Residence

The Study established the Influence of Kisumu Sea Port Project on the Livelihood of Kisumu residence and the results was as indicated in the Table 4.14

Table 4.14: Influence of the management of water hyacinth weed on the livelihood of Kisumu county Residence

The Level of influence Deviation	n	Mean	Standard
Disconnected connection	73	4.86	.82
High rate of poverty	73	4.05	.85
Reduction in quantities of fish	73	3.60	.87
Increased water pollution	73	3.70	.87

The respondents were of the opinion that the existence of water hyacinth led disconnected connection between Kenya and East and Central African countries with a high mean score of 4.86 followed by the rate of poverty within the region at 4.05. However, the increased water pollution and reduction in Quantity of fish had a low mean score of 3.70 and 3.60 respectively. This implied that menace in the Kisumu sea port had greatly lead to disconnect to difference countries and had further lead to high rate of poverty .

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings, discussions, conclusions and recommendations based on the analysis in chapter four. It also outlines the contribution to the body of knowledge and suggestions for further research. The conclusions and recommendations drawn were focused on which was The conclusions and suggestions drawn were centered around addressing the purpose of this study which was to assess factors influencing the management of water hyacinth weed, in Kisumu County ,Kenya

5.2 Summary of Findings

This study therefore intended to investigate factors influencing t the management of water hyacinth weed, in Kisumu County, Kenya, with the special focus of Kisumu Sea port project in Kisumu County, Kenya. A sample size of 91 respondents comprising of Community Elders, Fishermen, fish traders and Project Team Managers was purposively selected. The finding was as explained below.

5.2.1 Procurement procedures and the management of water hyacinth.

The study revealed that bureaucracy in the Procurement Procedure influenced the management of water hyacinth weed, with a high mean of 4.41. This was seconded by a majority with a mean of 4.08 indicating that competency level in the procurement procedures is also key to the project Management. However, minority of the response with a mean of 3.10 felt that experts carrying out the evaluation were not of a great

influence to the Project Management seconded by small number of respondent who indicated that Time frame for tendering process has minimum influence in the project management with a mean of 3.25. This implied that bureaucracy and competencies of the committee are the major factors in the procurement procedures that influence the management of the Project compared to expertise in the evaluation and timeframe set to carry out procurement procedures. This implied that bureaucracy and competencies of the committee are the major factors in the procurement procedures that influence the management of water hyacinth weed.

5.2.2 Budgetary allocation and the management of water hyacinth .

The opinion regarding budgetary allocation in the Management of public private partnership project is very important as far as s is concerned. The study revealed that appropriate and effective budget was key with a mean of 4.42, followed by the opinion that the estimated budget also should be realistic with a mean grade of 4.37 and finally more respondent with a mean of 4.27 indicated that corruption also affects the budget which will further influence the Management of project. However at an average of 1.51 indicated that the budgetary allocations are normally utilized as per the plan and an average of 3.78 indicated that Budget allocation leads to successful of the Project. This implied that appropriate and effective budget is of more importance to project management.

5.2.3 Project Manager Competencies and the management of water hyacinth.

The results indicated that the project manager competency in the management project is important. A higher mean of 4.37 of the respondents confirmed that is the role of the Project Manager is to ensure that projects are delivered on time as per the schedule and a high mean of 4.27 of the respondents also affirmed that interpersonal skill of a project manager is key in managing a project team. Nonetheless, an average of 2.83 affirmed that the level of education does not necessarily show the level of competency of the Project Manager. This implied that project Managers should possess at least qualities of

both a manager and a leader in order to deliver because the overall responsibility lies in the leadership which is the project manager.

5.2.3 Community participation and the management of water hyacinth.

Community participation is a central element, from a project's conception to its management. This study strongly indicated that failure to involve community in the project could lead to a negative influence with a mean of 4.79. In addition, a mean of 4.78 of the respondents indicated that community members must be part of the planning team in the project Management and that community participation is key to project success .However, minimum number of the respondent with a mean of 2.73 indicated that community should not be involved in specific nature of work within the project. This implied that community forms part and parcel of projects therefore should be involved from the conceptualization phase of the project.

5.2.4 Communication Management and the management of water hyacinth.

The result clearly demonstrated that efficient and effective communication leads to error and problem detection within the project by a mean a high mean of 4.36 of the respondents. This was with a mean of 3.99 indicating that both horizontal and vertical communication from all parties to the projects should be encouraged. However respondent with low mean of 3.04 were of the Opinion that communication is key factor to project Management. In general, the study shows that effective communication and feedback is of important in the project lifecycle, this is because through communication all the issue of concern can be adequately addressed.

5.3 Discussions

5.3.1 Procurement procedures and the management of water hyacinth.

Laedre et al, (2006) contends that in order to enhance project performance, an increased understanding of how different procurement procedures affect aspects of project performance is vital. This was confirmed by the study which found out that beaurocracy

in the procurement influence the project management at 68%, competencies of the participants of the Procurement Committees at 56% and Competitive Procurement at 25% .Generally, these are Very important in the Procurement procedures in the Project Management. Therefore in order to ensure smooth procurement processes, those tasked with procurement activities and Management in general should ensure that the initiation of the procurement are done in time, qualified procurement professional be recruited to carry out various procurement duties and unnecessary beaurocracy to be eliminated for efficiency in service delivery. This may not only ensure that the project is completed on time, but will also ensure quality and transparency in the process.

5.3.2 Budgetary allocation and the management of water hyacinth.

Gwadoya (2001) observed that financial resources for construction projects should be estimated realistically at the time of planning for the project. And Pace (1990), stated that it is important to allocate required funds for each construction project, These are very true observations which was confirmed by the high rate of response on the importance of appropriate and effective Budgetary estimation by 67% ,Budget allocation by was also found to be of great importance with a score of 38% hence should be realistic enough depending on the size of the project and other external factors ought to be put into consideration when coming up with the budget. All factors are of great concern hence during the conceptualization stage of the project, the Partners involved should ensure that the budget is realistic, appropriate and effective in order to meet the project finances. In addition the corrupt individuals should be dealt with accordingly in line with the Law to ensure that no money is lost through corrupt means.

5.3.3 Project Manager Competencies and the management of water hyacinth.

A Project manager needs to work with various offices associated with the task to evaluate lead times so they address the issues of the basic chain (Goldratt, 1997). Reiss (1993), recommends that a project is a human action that accomplishes a reasonable goal against

a period scale and that undertaking project management includes a mix of individuals administration and administration of progress. This was supported by this study which found out that; Leadership is an important too for project managers by 47% score and that project manager needs to have different leadership styles on order to deliver on the project with a respondent of 59% agree on that importance. Therefore, in order to ensure proper Management in the Project Managemet, Project Managers should possess at least qualities of both a manager and a leader in order to deliver because the overall responsibility lies in the leadership which is the project manager.

5.3.4 Project Manager Competencies and the management of water hyacinth.

The required level of community participation will most likely result in prompt social and individual strengthening, financial improvement, and sociopolitical change (Kaufman and Alfonso, 1997). This research confirmed that Community participation is an essential element, from as project's conception to its management. This study strongly indicated that failure to involve community in the project could lead to a negative influence with a high score of 84% and that community members must be part of the planning team in the project Management with a score of 82%. Effective community participation therefore may instill a sense of belonging and Possession; hence Communities should be part and parcel of the project from its conceptualization to completion.

5.3.5 Community participation and the management of water hyacinth.

Shutt (1992), state that it is the lack of early consultation and co-operation that has hampered communication and subsequently timely project delivery. This was evident by the level of respondent which ascertained that Communication failure in and outside the project leads to project failure with a score of 53% and that both horizontal and vertical communication is important in project implantation with score of 55%. These result clearly demonstrated that effective communication and feedback is of important in the project lifecycle and is the responsibility of the leadership to create a free environment to ease all form of communication to enable project Management.

5.3 Conclusions

The study revealed that Procurement Procedure in the management of water hyacinth weed is important and that bureaucracy in Procurement Process and Competency in the Procurement committee hinders the management of Kisumu sea port project. However, Minority felt that Time frame for tendering process and experts to carry out the evaluation were not of a great influence.

The result regarding budgetary allocation, the study revealed that appropriate, effective budget and realistic estimated of the budget were key in the project management. Also the respondent indicated that corruption affects the budget which will further influence management of the project. However at low average of the respondents indicated that the budgetary allocations are normally utilized as per the plan and that Budget allocation leads to successful of the Project.

The results indicated that the project manager competencies in management of the project are important. With high mean of the respondents confirmed that is the role of the Project Manager to ensure that projects are delivered on time as per the schedule and that interpersonal skill is key to manage a project team. Nonetheless, a low average of the respondents affirmed that the level of education does not necessary show the level of competency of the Project Manager..

Community participation is a central element, from a project's conception to its management. This study strongly indicated that failure to involve community in the project could lead to a negative influence and that community members must be part of the planning team in the project management . Also the respondent showed that community participation is key to project success. However, respondent with a low average mean of respondent indicated that community should not be involved in specific nature of work within the project.

Community participation is a central element, from a project's conception to its management. This study strongly indicated that failure to involve community in the project could lead to a negative influence and that community members must be part of the planning team in the project management. Also the respondent showed that community participation is key to project success. However, respondent with a low

average mean of respondent indicated that community should not be involved in specific nature of work within the project.

5.4 Recommendations

1. The study clearly confirmed that procurement procedures are key to the project management. Factors such as bureaucracy of procurement procedures and competencies in the procurement committee stood out to have had a higher influence in the project management. In order to mitigate such factors, the Project team and parties involved should reduce the beaurocracy in the procurement process and competent procurement committees should be appointed in place to effectively and efficiently handle the procurement processes.
2. The study also showed that budgetary allocation in the management of water hyacinth project is very important as far as project is concerned. This was ascertained by a high mean of respondents who showed that appropriate and effective budget, realistic estimates were key to project management. In order to mitigate such issues, professional financial planners and adviser need to be involved from the conceptualization phase of the project to assist in dealing with financial issues in project and proper planning of all parties concerned to be undertaken.
3. Project Manager is usually involved in the overall management of the project hence from the study, the results showed that it is the responsibility of the project Manager to ensure that the Project is delivered as schedule and that he or she should have interpersonal skill required to handle different individuals in the project team. In order to effectively and efficiently handle the project team and resources, the Project Manager should have necessary skill levels and attributes required of a leader and a manager.
4. The study confirmed that community participation is important to ensure that ideas and perspectives stakeholders are represented; members of community should be invited to participate in project scope identification and management and sustainability. In addition the result showed that Participation improves the quality project management and gives a sense of belonging to the stakeholders the study therefore recommends that the success of the project depends on the

community participation and involvement. The project developers therefore should consider key stakeholders in the project stages for ownership and acceptance.

5. Efficient and effective communication is part of good organization system; this study asserted that communication leads to accuracy of information, increased credibility and acceptance of findings and better correspondence to the practical concerns of the project team. In order to ensure timely feedback in the project processes, the project team therefore should be encouraged communication at all stages in the project life cycle.

5.5 Suggestion for further research

1. The study recommends that further research should be done on management of water hyacinth as this study concentrated on Kisumu Sea Port, to establish more factors influencing management of the water hyacinth weed, Kisumu county Kenya.
2. In addition, research should be done on the policy measures that can be strategically developed in order to manage the water hyacinth weed.

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APPENDICES

APPENDIX 1 LETTER OF TRANSMITTAL

Dear Sir/Madam,

RE: FACTORS INFLUENCING THE MANAGEMENT OF WATER HYACINTH WEED IN LAKE VICTORIA, KISUMU COUNTY KENYA.

I am a Master of Arts student at the University of Nairobi. I am and in my final year of study and I am required to conduct a research project as part of the course. As part of the requirement for the award of the degree of Master of Arts in Project Planning and Management, I'm undertaking a research project on "**FACTORS INFLUENCING THE MANAGEMENT OF WATER HYACINTH WEED IN LAKE VICTORIA, KISUMU COUNTY KENYA.**". In this regard, I am kindly requesting for your assistance in providing responses to the attached questionnaire. Your precision and sincerity will be critical in ensuring the quality and objectivity of this research. You may choose not to write your name on this questionnaire if you so wish. The responses will be treated in strict confidence. In addition, the findings of the study will solely be used for academic research purposes. Thank you for your valuable time on this.

Yours faithfully,

University of Nairobi

APPENDIX 11 RESEARCH QUESTIONNAIRE

This questionnaire is designed to gather information on the factors influencing the Management of water hyacinthweed in Lake victori, Kisumu County, Kenya. The study is being carried out for a research project in partial fulfillment of the requirements for the award of degree of Master of Arts degree in Project Planning and Management of the University of Nairobi. The information in the questionnaire will be treated with absolute confidentiality and at no instance will the name of the respondent or that of the organization he/she represents be mentioned in the research nor will the information provided be used for any purpose other than for this research.

SECTION A GENERAL QUESTIONS

Please tick (√) the appropriate box to indicate your answer.

1. Please indicate your sex

Male [] Female []

2. Age

Below 25 Year [] 26 – 35 Years [] 36 Years and above []

3. For how long have you benefitted from the sea Port operations?

Below 5 years [] 10 years [] 20 years []

4. Kindly indicate your highest professional qualification

O-Level [] Certificate [] Diploma [] Bachelor Degree [] Master []

SECTION B. Public Private Partnership

5. Is projectsmanagement important to the county?

Yes [] No []

6. Which of the following kinds of financiers are usually interested in projects?

a. NGOs []

b. Banks []

c. Donors []

7. Indicate the extent to which the following factors influence the management of water hyacinth weed in Lake Victoria ? Use a scale of 1-5, where 1- very low extent, 2- low extent, 3- neutral, 4- great extent, 5- very great extent.

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	Environmental factors					
2	Political affiliations					
3	Social economic factors					
4	Cultural factors					

SECTION C Procurement procedure in the management of water hyacinth weed 8. Is Public Procurement and Disposal Act 2015 of Kenya apply to procuring of projects?

Yes [] No []

9. Kindly indicate your level of agreement with the following aspects of procurement procedures and how they influence the management of water hyacinth weed? Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

No	Factors	Please Indicate the Extent				
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		1	2	3	4	5
1	Timeframe for the tendering process in Procurement Procedures is key in Management of Projects?					
2	There must be a given number of Interested organizations who provide procurement services in the Project in order to ease Management?					
3	People who are involved in the procurement committee must be competent.					
4	Procurement Beaurocracy hinders the management of water hyacinth weed projects?					
5	Before engaging in project the government and partners ensure that there is availability of experts to evaluate responsive bidders and recommend the best in the management of the project.					
6	Governments recognize the importance of the competitive procurement process in project funding.					
7	Government considers responsive bidders to the project negotiation					

SECTION D Budgetary allocation in the management of water hyacinth weed project

10. Indicate the extent to which the budgetary allocation in the influences the management water hyacinth weed in Lake Victoria of project? Use a scale of Use a scale of 1-5, where 1- very low extent, 2- low extent, 3- neutral, 4- great extent, 5- very great extent

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	The duration taken to approve the Budget in project is very crucial for project Management.					
2	Appropriate and effective budget is important requirement for project Management.					
3	Budget allocated in various projects are utilized according to the plan.					
4	Budget allocation should be realistically estimated in the planning phase					
5	Availability of enough budget allocation leads to successful project?					
6	Corruption of individuals within the projects affects the Budget allocated to the projects					

SECTION E Project Manager Competencies in the management of water hyacinth weed.

11. Please indicate the level of agreement with the following aspects of Project Manager Competencies in the management of water hyacinth weed in lake Victoria project? Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	The number of years of experience shows the capability of the project team to deliver on projects					
2	Project manager level of education shows his/her competency.					
3	A project manager need to have Project Planning skills in order to carry out projects					
4	Leadership an important tool for project managers to manage the project.					
5	Project managers frequently monitors the progress on the project activities hence should advice on the necessary actions to be taken by the stakeholders					
6	Project manager need to have different					

	leadership styles in order to deliver on projects					
7	Project manager need to ensure that the projects are delivered on time as per the schedule					
8	Interpersonal skills is key to mangers in order to manage a project team					

SECTION F Community Participation in the management of water hyacinth weed.

12. Please indicate the level of agreement with the following aspects of community Participation in the management of water hyacinth weed projects? Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	Project team must hold meetings frequently with the community in order to give feedback on the progression of the project.					
2	The community should be involved in a specific nature of work within the project.					
3	There should be a specific number of workshop to be held before the management of the project can commence					
4	Community members should be given a chance to Exercise control over resources					
5	Community members has the power to allow the management of the Project					
6	Community members must be part of the					

	planning team in the project management					
7	Members of the community must be involved in Making of decisions in relation to the project.					
8	Community participation is key to project success					
9	Failure to involve the community in the project affects them negatively.					
10	All projects can be sustainable through community involvement.					

SECTION G .Communication management in the management of water hyacinth weed.

13. In your opinion, to what extent, does the communication management influence the management of water hyacinth weed project? Use a scale of 1-5, where 1- very low extent, 2- low extent, 3- neutral, 4- great extent, 5- very great extent

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	Communication failure in and outside the project leads to project failure.					
2	Efficient and effective communication leads to detections of errors /problems within the project.					
3	Communication is key in project Management.					
4	Both Horizontal and vertical communication is important in project management					
5	Records of communication should be kept in all stages of Project					
6	Feedback from all parties on the project					

	should be encouraged.					
7	Commination means/channel should be flexible enough to ease project Management					

SECTION H GENERAL QUESTIONS

14. Will the Said Project Be Beneficial to you?

Yes [] No []

15. In your opinion, to what extent, do the following factors influence the the management of water hyacinth weed project? Use a scale of Use a scale of 1-5, where 1- very low extent, 2- low extent, 3- neutral, 4- great extent, 5- very great extent

No	Factors	Please Indicate the Extent				
		1	2	3	4	5
1	The existence of water hyacinth has disconnected connection between Kenya and East and Central African countries					
2	The existence of water hyacinth has led to high rate of poverty within the region.					
3	The existence of water hyacinth has a reduction in quantities of fish within the lake					
4	The existence of water hyacinth has a increased water pollution					

Thank You

APPENDIX 11I RESEARCH PERMIT