

Determinants of Exploitation of Kenya's Blue Economy among Policy Actors Case of the State Department of Maritime and Shipping Affairs in Kenya

Thuo Kinyua^{1*}, Dr. Wilson Muna PhD.²

¹Public Policy Scholar in Department of Public Policy and Administration of Kenyatta University & Co-Founder of Taftiti Sera Think Tank.

²Lecturer of Public Policy, Administration and Management at Kenyatta University, Kenya
Corresponding author*

Abstract: The exploitation of Kenya's Blue Economy presents a challenge for policy actors in the process of policy harmonization and creating synergy among the diverse policy actors and their agencies. This study interrogated the nature of engagement of this policy actors with the State Department of Maritime and Shipping Affairs under the Blue Economy by utilizing the parameters of Coordination Mechanisms, Information Sharing and Resource Mobilization. The objective of this study was to establish how these parameters impact on the exploitation of Kenya's Blue Economy. The theory employed for this study was the Self-Governance of Common Pool Resources Regime Theory. The study population included the members of staff of the State Department. The data collection instruments utilized were questionnaires and interview guides. The study established that indeed the three affected the exploitation of Kenya's Blue Economy. The study progresses to propose policy recommendations to the challenges by proposing actionable policy guidelines.

Keywords: Blue Economy, Coordination Mechanisms, Exploitation, Information Sharing, Policy Actors, Resource Mobilization, State Department for Maritime and Shipping Affairs (SDMSA), Ministries Departments and Agencies (MDAs), Domestic Resource Mobilization (DRM).

I. INTRODUCTION

Kenya like many of her peers in the global south, gained her independence during the cold war. The government that was formed upon independence led by President Jomo Kenyatta focused on eradicating three "enemies of progress" these were; poverty, ignorance and disease. Kenya's economy has since then weathered many storms to emerge as the 6th largest in Africa and among the 5 top most rapidly growing economies of Africa in 2018 (Relsen, 2010). This is despite the fact that Kenya's economy is faced with a myriad of challenges that have hampered its growth throughout its 6 decades of existence chief of which being corruption and poor governance (Relsen, 2010).

Kenya's economy is facing new challenges in the backdrop of the launch of the implementation of Vision 2030, the

countries Development blueprint plan, that is intended to propel the country towards middle income status by the year 2030 (UNDP, 2018). Some of this challenges include the rise in the rate of youth unemployment as a consequence of population growth and over reliance on agriculture as a prime sector of Kenya's economy. The challenges in the agriculture sector can be attributed to the over-reliance on rain fed agriculture that has of late become unreliable due to the erratic weather patterns prompted by climate change (KIPPRA, 2018).

As such, economic planners foresaw the urgent need to diversify Kenya's economy so as to aid it to grow by double digits and facilitate the realization of the aspirations of Vision 2030. Adoption of the Blue Economy in Kenya was then deemed as a viable solution to spurring the rapid growth of Kenya's economy to solve the challenges of youth unemployment, diversification of the economy and reduction in the over reliance on agriculture as a principal sector of the economy (Mwiti, 2018). This was justified by the fact that the Blue Economy in Kenya was perceived as a "low hanging fruit" whose exploitation is relatively easier.

This notion was based on three main factors that are; first the sub sectors of Blue Economy in Kenya have been fairly exploited individually before the synergy under the Blue Economy was initiated. Secondly, based on the first factor, some infrastructure has already been established hence reducing the economic cost of exploitation, such as the existence of Bandari College that has been identified for upgrading into a Regional Centre for Maritime excellence. The last factor that is more straightforward is the existence of the unexploited opportunities that Blue Economy holds (KIPPRA, 2018).

As such, a raft of measures and policy interventions have been put in place in pursuit of exploiting the Blue Economy such as; the recognition of the Blue Economy as a stand-alone sector of Vision 2030 in Medium Term Plan III (MTP III).

The establishment of a State Department of Fisheries and the Blue Economy under the Ministry of Agriculture and the Blue Economy Implementation Committee recently upgraded to a standing committee (Mwiti, 2018). Lastly was the pioneering step the government of Kenya took in hosting the first ever Global Sustainable Blue Economy Conference in Nairobi with Canada and Japan as Co-hosts (RSGBEC, 2018).

The Blue Economy exploitation process is multi-faceted and requires a lot of input from diverse policy actors of different backgrounds. The same discourse is playing out in Kenya as she endeavours to exploit her Blue Economy. The policy actors are drawn from different key line ministries, state departments and their Semi- Autonomous Government Agencies (SAGAs) under them such as the Ministry of Transport, Infrastructure, Housing and Urban Development, Ministry of Agriculture and Fisheries, Ministry of Tourism, Ministry of the Environment, Ministry of Foreign Affairs and the Ministry of Finance and Planning (Omingo, 2017). For the exploitation of the Blue Economy to be effected seamlessly and in synergy a lot of cooperation and harmonisation of policy by the concerned policy actors from the above named public entities is paramount. As such, this study assesses the coordination mechanisms, information sharing and resource mobilization of the Blue Economy in Kenya by the diverse policy actors as the variables for the undertaking of this study which are discussed below in depth.

II. RESEARCH QUESTIONS

This research questions that guided this research undertaking were three in number and they were; first, how does the coordination mechanism among the policy actors of Kenya's Blue Economy determine its exploitation? Secondly, how does information sharing among policy actors of Kenya's Blue Economy determine its exploitation? Lastly, how does resource mobilization among Kenya's Blue Economy policy actors determine its exploitation?

III. RELEVANCE & CONTRIBUTION

The Blue Economy is a concept that was first embraced by the Small Island Developing States (SIDS) after they felt marginalised by the Green economy policies that were being championed by the United Nations in the Rio + 20 of June 2012. It has since then been embraced by a number of developing countries in the global south as a means to diversify their economies and spur the growth of their economies. It entails the integration of the exploitation of water resources such as the oceans, lakes, rivers and other water bodies into the economic base in order to promote economic growth, social inclusion and improvement of livelihoods while at the same time ensuring environmental sustainability in the spirit espoused by the Sustainable Development Goal 14. As such, the first ever Global Sustainable Blue Economy Conference was hosted by Kenya, Japan and Canada and held in Nairobi. The conference focussed on seeking to integrate an innovative approach to the economic exploitation of Blue Economy resources.

As such, it lacks sufficient documentation seeing that most countries are just in the inception stages of adopting the blue economy. Critical aspects such as the challenges that may face exploitation of the blue economy by diverse policy actors are yet to be studied and documented. This study endeavours to assess and present the challenges that policy actors face in coordination mechanisms, information sharing and the mobilization of resources while exploiting the Blue economy based on the facts that, first it is a multi-sectoral concept that necessitates the harmonisation and coordination of activities of diverse policy actors drawn from diverse fields.

Secondly, the findings of this study are targeted towards a broad audience that entails first and foremost the policy actors in the Blue Economy implementation process such as government bureaucrats and officers from diverse implementing agencies such as the concerned State Departments and their Semi-Autonomous Government Agencies (SAGAs) under them such as the Kenya Maritime Authority, Bandari college and the Kenya National Shipping line just to name a few. Blue Economy researchers and academia both national and international will find the findings of this study relevant to their work based on the fact the topic is yet to be studied and findings documented for the global audience on this rapidly developing concept that is the Blue Economy in the field of Developmental Economics (UNECA, 2014).

The third attribute is as direct as the fact that since no prior studies have been conducted on the effects of coordination mechanisms, information sharing and resource mobilization on the exploitation of the Blue Economy in Kenya, this study naturally serves as a reference study for any further research on the same topic. Lastly, the recommendations of this study are outlined in to actionable policy interventions aimed at diversifying economies, creating jobs and improving livelihoods in line with the Sustainable Development Goals (SDGs) that might be adopted to enhance efficiency and effectiveness in the Blue Economy exploitation process in Kenya as well as other economies that have embarked on exploiting their Blue Economies that can use the findings of this study as an effective bench marking tool.

3.1 Coordination Mechanisms

Groth (1999) asserts that coordination is a classical term in Organizational vocabulary and is a fundamental activity in organizing work. Coordination is also defined as an action performed in order to "bring different elements of a complex activity or organization into a harmonious or efficient relationship" March and Simon (1958). Malone and Crowston (1994) contend that coordination can be studied jointly with communication an assertion that is also shared by Winograd and Flores (1985) who contend that information systems are closely associated with the coordination of work. This is argument is made vivid in the fact that information systems are implicated in work routines via the information storage, retrieval and transmission capabilities to accomplish tasks by

imposing a rhythm and schedule on work processes (Orlikowski, 1991).

Coordination can be defined in terms of mechanisms as Henry Mintzberg contended in 1985. Largely considered the leading authority on coordination, he further asserted that organisations have five cardinal mechanisms for coordinating work for their members. This he listed as; Direct Supervision, Skill Standardization, Standardization of the Work Process, Output Standardization and Mutual Adjustment. Mintzberg further differentiated organizations along 3 basic dimensions; the key part of the organisation i.e. the one that plays a major role in determining success or failure secondly is the prime coordinating mechanism that is deployed as from the above listed and lastly is the type of decentralisation used i.e. how the subordinates are used in the decentralised process.

In a 1967 publication by Thompson, he contended that the most important purpose of coordination in the government as an organization is to formulate actions thereby reducing undesired variations and to control and anticipate actions. He further outlined the purposes of coordination as the provision of adequate information and early notices about impending policy issues, provides platform for giving supporting analysis and spelling out options of policy and ensuring prior consultation of all relevant government stakeholders. The recording and dissemination of policy decisions and the monitoring the implementation of the said decisions are the main purposes of coordination in the government as an organisation.

Coordination mechanisms in government is designed for the articulation of policy which is guided by the following principles according to Manning & Beschel (1997); Discipline: this implies that the policies designed through coordination mechanisms ought to be financially realistic, consistent and implementable. Stability: espouses that erratic policy has been shown to be a major obstacle to promote investment and economic activity. Structured choice: implies that there should be prioritization of policy problems and lastly; Transparency: that ensures that there is consistency in the process of issue presentation to prevent the advancement of parochial interests.

A strong and effective secretariat are the pre-requisites for an effective policy coordination mechanism in government organisations. He further stresses that cooperation mechanisms in government organisations requires the following in order to thrive; informal networks of communication and cooperation of the civil servants, secondly in interdependent working groups such as Sector Working Groups and lastly formal mechanism for example committees (Robert 1992).

The challenges in policy coordination were outlined by Nicholaus (2002) as follows; first is policy vacuums that are a product of government discontinuity or weak and poorly articulated policy platforms, secondly is lack of trust among policy actors. Third is the unclear organisational roles or

conflicting agendas among key line ministries. Fourth is the poorly drafted and insufficiently costed cabinet submissions, fifth is the failure to set major policy priorities which don't translate into concrete operational decisions via the budget process. The sixth and last challenge is the presence of parallel and often invisible and unaccountable groups influencing policy from outside the formal government.

The Blue Economy concept being multi sectoral in nature calls for the unavoidable coordination of policy across a broad range of government actors. As such for the Blue Economy concept to yield concrete and actionable policy directives that can be implemented in order to realize its lofty goals, sound coordination mechanisms have to be put in place. This study thus assessed the coordination mechanisms as a parameter of the Blue Economy exploitation process in Kenya.

3.2 Information Sharing

Estevez (2010) defines information sharing as the capability of government agencies to obtain possess and apply information in common with others. It is not common in traditional Public administration and Management but is of critical importance for governments to effectively discharge their mandate and responsibility. Jiang (2009) outlined that Information Sharing can either be Vertical or horizontal. Information sharing in the public sector can either be classified into three main groupings according to Landsebergen and Woken (2001): Inter-personal information sharing, Intra-organizational information sharing and lastly, Inter-organizational information sharing.

The characterization of the technological and social processes involved in Information Sharing was done by Dawes (2004) into 4 main perspectives that are: I) organisational; in which the business and decision process that may require adjustment II) Technology that involves standards, metadata platform and application inter-operability, data quality attributes among others. III) Inter-organizational that involves the creation and maintenance of inter-organizational relationships, negotiation processes, commitments, trust building, risk reductions, resource conflict resolution among others. IV) Political that involves the legislation to enable collaboration and information sharing between agencies and include economic models to help agencies identify information sharing costs and benefits.

There are 4 inter-related elements of information sharing as prescribed by Burke (2009) that are; Shared information, Integrated data, interoperable technical infrastructure and Trusted social networks. Guler (2009) further stressed that the prerequisite for trusted social networks is threefold: - Exercise of authority, diversity of participating organisation, their goals and past experience and lastly a clear definition of the responsibility of members. From the Information Sharing models of the Kingdom of Bhutan and the United States' National Information Exchange Model (NIEM) the major efficiencies gained include; data combination and creation of new data sets promotes new research, it facilitates researchers

to participate in governance and development, helps citizens to make informed choices, facilitates information sharing in a cost effective manner and finally strengthens confidentiality.

The challenges that face Information Systems into; interagency partnerships that comprise trust and compatibility, upper level management that includes cross agency collaboration of government agencies, organizational readiness that covers IT capacity, support by the top management and the cost and security, individual expectations such as expected benefits and risks and finally the external environment that covers laws, policies regarding information sharing (Pengzhu 2009). Finally PengZhu finally identified the barriers to information sharing as technical, cultural and organizational of which he posited are hard to tackle by individual organizations.

The Blue Economy exploitation process in Kenya is premised to be conducted by a myriad of government agencies and multitude of policy actors drawn from a diverse mix of Ministries, Departments and Agencies (MDAs). Effective and efficient channels for Information Sharing ought to be established and cultivated in order to create the pre-requisite synergy and harmony in the policy coordination needed in exploiting Kenya's Blue Economy. Information Sharing was thus selected as a variable to be utilized in this study. The assessment of this variable of Information Sharing shall be based on first and foremost the establishment of the existing information sharing channels that is both formal and informal and establishing their effectiveness in the process of exploiting Kenya's Blue Economy.

3.3 Resource Mobilization

McCarthy (1989) defines resource mobilization as the process of getting resources from resource providers using different mechanisms to implement the organizations work and for achieving predetermined organizational goals. Further she posits that it is the act of acquiring needed resources in a timely cost effective manner. This is informed by the Resource Mobilization theory in the 1970s that was proposed in order to challenge social breakdown and relative deprivation theories that identify individual grievances as the sole stimulus for collective action (Heitzman, 1990). The RM theory contends that conflict and grievances are inherent in a thriving society thus Resource Mobilization among them is pegged on labour and money (Schreibman, 2015).

The mobilization of this resources surrounds various configurations of informal and social networks that are referred to as Social infrastructure by (McCarthy, 1987). The elements of Resource Mobilization are based on three fundamental activities; Communicating and prospecting, relationship building and organizational management and development (CIDRC, 2012). The Resource Mobilization Theory advocates for four principles that are; RM should be done at the right time, secondly that RM should be done at the right price, third is that RM should source for the right

resource type and finally that the resources mobilized ought to be optimized to guarantee maximum utility.

Resource Mobilization in the Public Sector is purposely meant for the raising of Public Revenue for the purpose of Government expenditure. RM in the Public Sector has four main functions that are classified into two broad categories recurrent expenditure and development expenditure (Kosimbei, 2017). The four main functions of Resource Mobilization for the Public sector can be outlined as; the protection function such as the financing of the security and defence budget, the Administrative function that comprises the funding of the ministries to effectively fulfil their mandate, the Social function such as education and recreation and finally the development function that entails provision of infrastructure for development (MTEF, 2011).

Resource Mobilization in the Public sector is divided into broad categories that are; Domestic Resource Mobilization (DRM) and foreign sources of public revenue. DRM sources comprise taxation and non-tax revenue sources whereas the foreign sources entail; grants, gifts and earned income, loans and conditional incomes and foreign aid (Wang'ombe 2008). Domestic Resource Mobilization is looked at more favourably and aspired to be the sole source of public revenue by most economies since it asserts economic autonomy and sovereignty (Wang'ombe 2008).

Domestic Resource Mobilization is the generation and collection of public revenues through taxes and fees both domestically and internationally to finance the provision of public goods i.e. education, infrastructure, public order and healthcare (World Bank, 2018). A prudent recommendation put forth by the International Monetary Fund (IMF) urges that countries collecting less than 15% of GDP in taxes must increase their revenue to meet the basic needs for their citizens and businesses (IMF, 2016). The African Economic Outlook (2010) outlined that broad based development ought to be founded on a cornerstone of effective DRM which achieves the following goals; building of accountable states, ownership and governance and reduction of external dependence. Further, the publication stressed that DRM can be improved by deepening the tax base, diversifying the tax mix and improving tax administration (Africa Economic Outlook, 2010).

The exploitation of Kenya's Blue Economy is a resource intensive endeavour in itself. As such, sound resource mobilization strategies need to be formulated and meticulously implemented if the aspirations of Kenya under her Blue economy are ever to be realized. Resource Mobilization shall be assessed by identifying the avenues of resource mobilization for the exploitation of Kenya's Blue Economy and an analysis of their effectiveness shall then be conducted to ascertain and meet the study's objectives.

IV. THEORETICAL FRAMEWORK

The “Tragedy of the Commons” is a phenomenon that arises when it becomes difficult or very expensive to exclude potential users from common pool resources that produce finite flows of benefit as a result of which those resources will be exhausted by rational utility, maximizing individual profit rather than being concerned with the benefit of all. This concept was initially highlighted by Garret Harding (1968) in a paper published in the Science journal. He contended that there was a need to re-look at how common resources were managed away from the model that traditional views offered by theories such as the Conventional Theory of Common Pool Resources.

Common Pool Resources (CPR) are resources that yield finite flows of benefits and where it is difficult or expensive to exclude potential users. Some examples of Common Pool Resources comprise ocean resources, irrigation systems, grazing lands, forests, government and corporate finance and ground water basins of which the resources yielded from the above are water, pasture, timber and budgetary allocations (Ostrom, 1985). CPR are more often than not Open access which has in the past resulted in tragic levels of overuse and sometimes destruction especially in the resources of fisheries and forests (Olson, 1965).

As aforementioned, the Conventional Theory of Common Pool Resources (CTCPR) predated the theory of Self organized Resource governance systems. The CTCPR is premised on the studies of two prominent scholars Gordon (1954) and Scott (1955) who published on Open Access Fisheries. The theory is based on the assumption that the resource generate a highly predictable finite supply of one type of resource unit in each relevant time period. The second assumption is that the appropriators (users) are assumed to be homogenous in terms of their assets, skills, discount rates and cultural views. Short term profits are maximized by actors who possess complete information. In this theory, anyone can exploit the resource and appropriate resource units. The appropriators act independently, do not communicate and don't coordinate activities in any way and they gain property rights only to what they harvest and then sell it in an open and competitive market (McEvoy, 1996).

4.1 Self-Governance of Common Pool Resources Regime Theory

The Self Organized Resource Governance System was proposed by a group of scholars in the backdrop of the publication of Garret Harding's paper in 1968. It was proposed not to challenge the conventional theory in its entirety but rather its generalizability. Olson (1965) posited that resource scholars agreed with Harding that there has to be organisation so as to specify who is an authorized user and their rights and duties concerning a public good for those involved. Contrary to the conventional theory multiple studies have outlined the social dilemma to craft regimes to govern common pool resources (Ostrom, 2005).

Elinor Ostrom (2005) contends that the use of self-organized resource governance systems will expand considerable time and energy devising workable regimes for governing and managing common pool resources. Secondly she contends that the appropriators will follow costly rules if they believe other appropriators will, third is that they shall monitor each other's conformity with the rules and thus impose sanctions to each other at a cost to themselves and lastly she posits that governing and managing complex resources is likely to generate unexpected results and be subject to initial errors. Elinor thus highlighted that this challenge must be solved in order to arrive at an effective governance structure of common pool resources which were: the challenge of appropriators organizing and establishing the rights and duties for the participants. This is a challenge to which she proposed the following solution:-

For an effective Self Organised Resource Governance System to form the common pool resource and appropriators must have the following attributes: The resource ought to possess feasible improvement which means that its quantities ought to be sufficient to produce the benefits after organisation. Secondly is that it ought to have reliable and valid indicators of benefits that are accessible to all appropriators. Third feature is that of predictability of the flow of the resources and lastly is spatial extent of the resources in which the appropriators can easily demarcate the boundaries (Ostrom, 2005).

The appropriators on the other hand ought to have the following characteristics; salience which denotes that the appropriators ought to be dependent on the resource for a sizeable chunk of their life. Secondly is common understanding of the common pool resource and how actions of the different appropriators affect the other. Third is that the appropriators ought to use a lower discount rate in comparison to the future expectation after organisation. Fourth is trust and reciprocity among the appropriators. Fifth is the autonomy in which the rules agreed to by the appropriators ought not to face contradiction from sub national, national and international law. Lastly is the function of prior organizational experience and local leadership (Ostrom, 2005).

Lastly Ostrom (2005) posited that the key to further theoretical integration is to understand how this attributes interact in complex ways to affect the basic cost benefit calculations of a set of appropriators using a resource. Further she highlighted that the success and longevity of Self-governance of common pool resource regimes is pegged on the following factors;

- I. Having clearly defined boundaries
- II. Congruence in the rules of benefits and cost (Mckean, 1982)
- III. Making collective choice agreements between the appropriators
- IV. Monitoring of the compliance with the rules set

- V. The imposition of graduated sanctions by the appropriators amongst themselves
- VI. Having in place effective conflict resolution mechanisms
- VII. Having in place the minimal recognition of rights to organize with the support of overarching legal regimes.
- VIII. Having nested enterprises that implies that there is a multi-layered method of conflict resolution. (Ostrom, 2005).

The challenges to the theory are that first the issue of size or number of the attributors for studies show that the theory is effective in cases with fewer attributors as argued by Burchanan & Tullock (1962). Secondly is the issue of heterogeneity in which multiple studies also depict that the framework is also highly effective in situations that the appropriators have more homogenous characteristics such as ancestry and ethnicity. (Balland & Platteau, 1996).

This theory is most appropriate for this study based on two major factors; the resources under the Blue Economy domain are common pool resources and secondly and most importantly the execution of the Blue Economy policies which shall adopt a Top-Down approach entails numerous policy actors from diverse government agencies that compete for the limited financial resources in budgetary allocation in order to implement their programs and activities an aspect that presents itself as attributors competing for a common pool resource.

V. METHODOLOGY

The study adopted a descriptive research design based on the fact that a descriptive research design is best adopted to assess a phenomenon that is complex and difficult to observe. The Blue Economy concept is a developing phenomenon and as such a descriptive research design is best suited for this study. It is for this reason that the choice of the descriptive research design is justified for it is deemed a glove fit for interrogating the Blue Economy concept in Kenya in accordance with the objectives of the study.

5.1 Research Instruments

Data for this study was collected with the aid of two main research instruments that were questionnaires and interview guides for primary data collection which then complemented the secondary data already available. The questionnaire required from the respondents in depth information based on the variables that were; coordination mechanisms, information sharing and resource mobilization in regards to the Blue Economy exploitation process. The Interview guide on the other hand contained mostly open ended questions that were designed to get the unbiased insight on Kenya's Blue Economy from the policy actors at the management level in accordance with the research questions.

5.2 Data Collection

The questionnaire was brief so as to maximize respondent's cooperation and it entailed a lot of open ended questions so as to allow for the freedom of unbiased response that guaranteed the maximum collection of qualitative data. The interviews were conducted on three officers from the top management stratum drawn from different offices within the state department to ensure independent views were captured without cases of bias or influence. This was then ensued by the analysis of the data and the findings are discussed below.

VI. RESULTS AND DISCUSSION

6.1 Coordination Mechanisms

The study established that 74.5% of the respondents opined that indeed coordination mechanisms affects the exploitation of the Blue Economy. This was further stressed by the interviewees who all expressed the same sentiments citing the multiplicity of actors and the multifaceted nature of the Blue Economy exploitation process. 62.8% of the respondents opined that coordination mechanisms affects the exploitation of the Blue Economy by 50% and above. 98% of the respondents acknowledged that there exists gaps in the Coordination Mechanism of the Ministries, Departments and Agencies (MDAs) involved in the exploitation of Kenya's Blue Economy. 78% of the respondents agreed that Blue Economy Implementation Committee (BEIC) sufficed as the sole coordinating agency for the exploitation of Kenya's BE with the interviewees commonly citing it as key in building an effective Coordination Mechanism culture between the diverse agencies.

Further, 62% of the respondents concurred that Inter-Ministerial Working Groups, secondment and staff rotation were enough to bridge the Coordination Mechanism gap though the three interviewees were of the opinion that more needed to be done in order to realize effective Coordination in the exploitation of Kenya's Blue Economy. Lastly, the respondents were asked of the extent of coordination mechanisms expressed as a percentage between the State Department and other MDAs for the three Fiscal Years that it had been in existence; 2016/2017, 2017/2018 and 2018/2019. For the fiscal year 2016/2017, 72.5% of the respondents felt that inter-MDA coordination was below 20% while 76.5% felt that this improved to between 20-50% in the consecutive 2017/2018 fiscal year and lastly 60.8% of the respondents felt that this improved to 50% in the 2018/2019 Fiscal year.

From the findings above one can deduce that Coordination Mechanisms does indeed affect the exploitation of Kenya's Blue Economy within the State Department of Shipping and Maritime Affairs. The respondents were of the opinion that even though the rate of coordination mechanisms has been improving over the past three fiscal years since the establishment of the State Department, gaps still exist in the coordination of exploitation of Kenya's Blue Economy. This findings align to the empirical findings of Bartmann (2005) in

his presentation on Understanding Organizational Coordination in the 13th European Conference on Information sharing in which he concluded that there is a need to focus on the process of coordination. In doing that, one needs to focus on; the prerequisites of coordination, human action and finally results in this case one can attribute the gradual rise of coordination mechanism in the exploitation of Kenya's Blue Economy within the state department of shipping and maritime to the persistent engagement with the other MDAs and the mainstreaming of the Blue Economy in government policy.

6.2 Information Sharing

98% of the respondents felt that indeed Information Sharing affects the exploitation of Kenya's BE. 58.8% of this felt that Information Sharing affects the exploitation of the Blue Economy by over 50% with the rest of the opinion that it affected the exploitation of Kenya's BE by below 50%. 100% of the respondents agreed that indeed IS was vital for the operationalisation of multi-sectoral policies such as those entailed in the BE exploitation process in Kenya. 80% of the respondents acknowledged that there lacked formal information sharing channels between MDAs involved in the BE exploitation process. 88% of the respondents opined that the dissemination of BE data and information, should be to all staff members in the relevant MDAs regardless of their ranks or units. 100% of the respondents concurred with the fact that the establishment of a BE data bank accessible to all Policy Actors in the BE should be prioritized.

From the findings above on information sharing, would infer that indeed information sharing does affect the exploitation of Kenya's Blue Economy. The findings present that most of the respondents agreed with the statement that there was a deficiency in the formal channels of information sharing of the Blue Economy exploitation process and finally that there was need to enhance information dissemination among all staff of the agencies involved in the Blue Economy exploitation process regardless of rank and designation which ought to demystify the Blue Economy and aid greatly in the comprehensive exploitation process. The study established that the use of technology is the most efficient and effective way of entrenching information sharing in the exploitation of the Blue Economy since it bridges the geographical gap. This relates to Estevez (2010) findings from her empirical exposition on the Information Sharing in Government whereby she posits that technology is the most fundamental factor in enhancing information sharing in government to increase performance and increase efficiency and effectiveness.

6.3 Resource Mobilization

94.1% of the respondents were of the opinion that Resource Mobilization affects exploitation of the BE economy in Kenya with the rest being of a divergent opinion. 90% of the respondents concurred that Domestic Resource Mobilization is insufficient for effective exploitation of the Blue Economy.

As for the budgetary allocation towards the exploitation of the Blue Economy 90% of the respondents deemed Ring-fencing a great approach of which the interviewees confirmed had already been applied. The idea of setting up a Blue Economy fundraising committee was deemed prudent by 90% of the respondents with 86% of them deeming the establishment of the State Department of Fisheries and the Blue Economy a threat to the State Department's BE, Budgetary allocation.

From the above presentation of the findings, we can deduce that resource mobilization greatly affects the rate of exploitation of Kenya's Blue Economy. There is need to diversify the sourcing for the funding of the exploitation of the Blue Economy. This aligns to Patz (2017) who presented a paper on Resource mobilization for the funding of public projects at the UN financing summit in Munich August 2017.

VII. CONCLUSION

From the summary of the findings presented above, one can conclude that indeed Coordination Mechanisms, Information Sharing and Resource Mobilization have an impact on the exploitation of Kenya's Blue Economy. For Coordination Mechanisms, one can conclude that indeed a lot needs to be done in order to bridge the coordination divide and that, as time progresses and the BE exploitation process continues, coordination between the concerned MDAs is further entrenched as evidenced by the rise in the coordination levels throughout the three Fiscal years that the State Department has been in existence. There however remains gaps in the coordination mechanisms of the MDAs that are instrumental in the exploitation of Kenya's BE. Information sharing especially in the operationalisation of multi-sectoral policies such as the ones entailed in the exploitation of Kenya's Blue Economy, is very vital for the success of the policy. The study established that there was a deficiency in the formal information sharing channels between the diverse MDAs and the State Department in the exploitation of Kenya's Blue Economy. There was also disaggregation in the dissemination of BE data amongst the members of staff of the State Department. Lastly the study concluded that technology provided a great opportunity for the remedying of the challenge faced in the IS whilst exploiting Kenya's Blue Economy. The study concluded that Domestic Resource Mobilization does not suffice for BE exploitation and that alternative methods of fundraising had to be devised. The study also concluded that in budgetary allocation, there was rivalry in terms of resource allocation among the MDAs involved in the exploitation of Kenya's Blue Economy. Ring fencing of budgetary allocation for the BE exploitation was one of the remedies that the State Department had already embarked on as a measure to shore up resources for the exploitation of Kenya's Blue Economy.

REFERENCES

- [1] Beschel & Manning 2005 "Central Mechanism for policy formulation and coordination" Harvard University Press
- [2] Blue Economy concept paper- IMO (2013)

- [3] Blue Economy; “Sharing success stories to inspire change” UNECA 2016
- [4] Cooper & Schindler (2006) Business Research Methods. McGraw Hill 2006
- [5] DeMatteo (1997) The Basics of Market Research ISBN - 978642389304
- [6] Elinor Ostrom (2000) “Reforming the Commons” Swiss political Science Review Issue 28
- [7] Elinor Ostrom (2008) “Tragedy of the Commons” The new Palgrave Dictionary of Economics online
- [8] Estevez, Fillotrani, Janoski (2010) “Information Sharing in Government-Conceptual Model for Policy Formulation” Research Gate article available at : <http://www.researchgate.article264873582>
- [9] FAO (2012) the State of World Fisheries Aquaculture, Rome (FAO)
- [10] Fred Lunenberg (2012) “Organizational Structure: Mintzberg framework” International Journal or Organizational Science vol 14
- [11] Gerdener & Ostrom (1993) “Coping with Assymetries in the Commons: Self Governing Irrigation systems can work” Journal of Economic Perspectives vol 7
- [12] Godfrey Simone: Defining the Blue Economy – Research Gate-2016.
- [13] Golhasani and Hossinirad (2016) The role of Resource Mobilization Theory in Social Movement; International Journal of multicultural and multi-religious understanding Vol 3 issue 6
- [14] Helmut Relsen (2010) Public Resource Mobilization and Aid; Taking ownership of development; Africa Economic Outlook 2010; Berlin.
- [15] Huberman & Miles (1994) Qualitative Data Analysis for Applied Policy Research ISBN-9780642389064
- [16] IOC/UNESCO/IMO (2011) A BluePrint for Ocean Sustainability, Paris.
- [17] Jason Potts: Standards and the Blue Economy- International Institute of Sustainable Development April 2016.
- [18] Kothari C.R (1990) Research Methodology: Methods and Techniques
- [19] Leary (2001) Introduction to Behavioural Research Methods ISBN-9780134414409
- [20] Lee Mwitii (3rd July 2018) “Government Revamps Committee tasked with revamping the Blue Economy” – Standard Digital Available at: <https://www.standardmedia.co.ke/article/2001286448/government-revamps-committee-tasked-with-revamping-blue-economy>
- [21] Ministry of Information & Communication: Royal Government of Bhutan 2006 “Policy guidelines on Information Sharing” Available on <http://www.bhutan.go.mict.org>
- [22] Mugenda & Mugenda (2003) Research Methods Quantitative & Qualitative Approaches.
- [23] Nelleman C (2009) Blue Carbon. A Rapid Response Assessment UNEP ISBN 978-82-7701-060-1
- [24] Noone (2012) Valuing the ocean. Extended Executive Summary. Stockholm Environment Institute.
- [25] Omingo John (Head of Commercial Shipping KMA) Blue Economy; Strategy Presentation November 2017 at the Pride Inn hotel Mombasa.
- [26] Patz & Goetz 2017 “Resource, Mobilization strategies and administrative structures in the United Nations systems”; International Conference on Public Policy, Singapore 2017
- [27] Report on the Global Sustainable Blue Economy Conference 26th-28th November 2018, Nairobi Kenya.
- [28] Republic of Kenya (2011): *MTEF framework*, 2011. Nairobi: Government Printer.
- [29] Ult & Karin 2005 “Understanding Organizational Coordination & Information systems – Mintzberg’s coordination mechanisms revisited and evaluated” Proceedings of the 13th European Conference on Information Systems, Regensburg Germany.
- [30] UNDP Kenya Blue Economy Policy Brief April 2018
- [31] UNECA Blue Economy Handbook 2014
- [32] UNEP/FAO/IMO (2012): Green Economy in a Blue World ISBN 978-82-7701-097-7
- [33] UNWTO (2013) World Tourism Barometer 2013 Edition
- [34] Wang’ombe, A. (2008). *Advanced Financial Accounting*; Revision Manual.
- [35] Wairimu & Khainga (2018); Kenya’s Agenda in Developing the Blue Economy. Available at: <http://kippra.or.ke/kenyas-agenda-in-developing-the-blue-economy/>
- [36] World Maritime University “Women In Maritime Global Excellence Awards” Singapore 2017
- [37] Zheng, Yang, Jiang 2009 “understanding the ‘Boundary’ in Information Sharing & integration proceedings of the 42th Hawaii International Conference on Systems Science ISBN 978-0-765-3450-3