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**An assessment of the Blue Economy in Namibia: a case study
of Swakopmund and Walvis Bay**

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By

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ABSTRACT

The main thrust of this research was to assess the Namibia blue economy: a case study of Walvis Bay and Swakopmund. The research was aimed at identifying how the government can achieve inclusive growth while at the same time ensuring that there is sustainable resource management. A qualitative research design was then adopted, with the target population of the study being the Ministry of Fisheries and Marine Resources employees, and previously disadvantaged people in Namibia. A purposive sampling technique was used to select the Ministry of Fisheries employees, and a random sampling technique was adopted to reach the 40 previously disadvantaged people. The research revealed that the Namibian blue economy is not currently sustainably utilised, due to policy incoherence and weak enforcement of the Namibianisation policy. These findings establish the need for participatory policy design and implementation to develop community, which is crucial for the sustainability of the blue economy. The results also revealed the lack of multi-sector partnerships, thus effectively limiting the benefits that could be harnessed from the Namibian blue economy. If Namibia were to set up all the necessary institutions and build the relevant capacities, it would enjoy the benefits of resource efficiency, sustainable business operations, inclusive jobs and improved well-being.

TABLE OF CONTENTS

PLAGIARISM DECLARATION i

ABSTRACT ii

TABLE OF CONTENTS iii

LIST OF FIGURES AND TABLES vi

LIST OF ABBREVIATIONS vii

ACKNOWLEDGMENTS viii

1. INTRODUCTION 1

1.1. Research Area 1

1.2. Problem Statement 2

1.3. Research Questions and Scope 3

1.4. Purpose and Significance of the Research 4

1.5. Research Assumptions 4

1.6. Research Ethics 5

2. LITERATURE REVIEW 6

2.1. Introduction 6

2.2. Definition of Blue economy 6

2.3. Theoretical Literature 7

2.4. Sustainable Development Goals (SDGs) 9

2.4.1. SDG 8, SDG 12 and SDG 14 9

2.4.2. Fifth National Development Plan (NDP5) 10

2.5. Building a Blue economy: Namibia perspective 11

2.6. Blue economy: Opportunities, Blue growth and Benefits 14

2.6.1. Fisheries 14

2.6.2. Shipping and Port facilities 14

2.6.3. Tourism 15

2.6.4. Mari-culture and Aquaculture 15

2.6.5. Education and Research 16

2.7. Importance of public private partnership (PPPs) and multi-stakeholder partnerships within the Blue Economy 17

2.7.1. Government and PPPs 17

2.7.2. The Private Sector and PPPs 18

2.8. Understanding of nationally defined priorities, social context and resource base 19

2.8.1. Integrated coastal zone management 20

2.8.2. A healthy, resilient and productive marine environment 21

2.8.3. Infrastructure 21

2.8.4.	Education and capacity building.....	22
2.9.	Best practice for blue economy management in Namibia	22
2.10.	What the Namibian Government did in utilising the blue economy	23
2.10.1.	Namibian Blue Economy Institutional Framework	23
2.10.2.	The Namibian blue economy management system	24
2.10.3.	The granting of fishing rights by the MFMR.....	26
2.10.4.	Contributions to the Gross Domestic Product (GDP).....	26
2.10.5.	Policy or Legal Framework in the Namibian fishing sector	27
2.10.5.1.	The 1991 White Paper “Towards Responsible Development of the Blue Economy”	27
2.10.5.2.	Marine Resource Act (MRA) No. 27 of 2000 and the regulations relating to the exploitation of Marine Resources (2001).....	28
2.10.5.3.	Aquaculture Policy 2001.....	29
2.10.5.4.	Namibianisation	29
2.11.	Sustainability development outcomes of the blue economy	30
2.11.1.	Fishing.....	30
2.12.	Transforming fishing sector to promote economic empowerment of local communities	31
2.12.1.	The scope of the blue economy can be different depending on the sectors considered	31
2.12.2.	Optimising returns from existing activities.....	31
2.12.3.	Explore opportunities for the development of new economic sectors.....	32
2.13.	Summary of the literature reviewed	32
2.14.	Conceptual Framework.....	33
3.	RESEARCH METHODOLOGY.....	34
3.1.	Research Approach and Strategy	34
3.2.	Research Design.....	34
3.3.	Sampling	35
3.4.	Data Collection, Frequency and Choice of Data	35
3.5.	Data Analysis Methods	37
3.6.	Research Reliability and Validity	38
3.7.	Limitations	39
4.	RESEARCH FINDINGS, ANALYSIS AND DISCUSSION	40
4.1.	Introduction.....	40
4.2.	Sustainability of fish resources	40
4.3.	How can the Government utilise the blue economy for the majority empowerment?	42
4.4.	Is the Government encouraging sustainable fishing in the Namibian ocean?	46

4.5. Strategies the Government of Namibia adopts to reduce poverty, inequality and to promote entrepreneurship in the fishing sector	49
4.6. The transformation of the fishing sector in Namibia to promote economic empowerment of local communities	51
4.7. Challenges and Prospects for the Blue Economy Growth in Namibia	55
4.8. Summary of Findings.....	59
4.9. Conclusion	60
5. RESEARCH FINDINGS, ANALYSIS AND DISCUSSION	61
5.1. Discussion of Findings.....	61
5.2. The research gap	62
5.3. Contribution	64
Limitations.....	65
5.4. Research Conclusions	66
6. RECOMMENDATIONS FOR FUTURE RESEARCH.....	68
REFERENCES.....	69
APPENDICES.....	79
Appendix 1: Questionnaires	79

LIST OF FIGURES AND TABLES

Table 1: Contribution of the fishing industry to GDP (current values in \$ millions) 26

Table 2: Rules of origin..... 41

Table 3: Responses from (focus group discussion) FGD 1 42

Table 4: Responses from focus group 2 46

Table 5: Responses from FGD 3 49

Table 6: Response from FGD 4..... 52

Table 7: Challenges and Prospects for the Blue Economy in Namibia 55

Table 8: Literature and evidence from primary data..... 62

LIST OF ABBREVIATIONS

ACOM-Advisory Surveys Management Committee for Fishery Management

BEE- Black Economic Empowerment

DOS- Directorate of Operation and Surveillance

DPPE- Directorate of Policy, Planning and Economics

DRM- Directorate of Rescue Management

EAF- Ecosystem approach to fisheries

EEZs-Exclusive economic zones

ESCAP-UN Economic and Social Commission for Asia and the Pacific

EU-European Union

FIMS- Fisheries Information Management System

GDP- Gross Domestic Product

IBTS-International Bottom Fish Survey

ICES-International Council for the Exploration of the Sea (ICES)

ICZM-integrated coastal zone management

IVQ-Individual Vessel Quota

MFMR-Ministry of Fisheries and Marine Resources

MSC- Monitoring, control and surveillance

NAMFI- Namibian Maritime Fisheries Institute

NatMIRC- National Marine Information and Research Centre

PPPs- Public Private Partnerships

SADC-Southern African Development Community

SANUMARC-Sam Nujoma Research Centre

SDGs-Sustainable Development Goals

SEEA- System for Integrated Environmental and Economic Accounting

SIDS- Small Island Developing States

TACS-Total Allowable Catches

UNCED-United Nations Conference on Environment and Development

UNECA-United Nations Economic Commission for Africa

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1. INTRODUCTION

1.1. Research Area

Namibia became independent in 1990 from South African administration, and due to over-fishing, the level of fish stock in the country was approaching nearly depletion. Following independence, the government embarked on a process of Namibianisation of the fishing industry. The key objectives of this policy were to grant rights to Namibian operators; provide employment for Namibian nationals, especially those disadvantaged by discriminatory laws and policies; and to promote the export of value added products.

Namibia's fishery is one of the richest in the world, based on a dynamic eastern marine boundary outpouring system, the Benguela ecosystem. The commercial fisheries are dominated by three species: hake (*Merluccius capensis* and *Merluccius paradoxus*), horse mackerel (*Trachurus capensis*) and pilchard (*Sardinops ocellatus*). In constant 1995 prices, the asset value of fish stocks increased by 37 per cent in the 1990s, from \$N2, 323 million to \$N3, 384 million, reflecting the specific growth of hake stock and the general increased economic value of all stock. The quota levies on fish generate significant government revenues, although as a share of rent, they appear to have declined from around 50 per cent in 1991 to around 20 per cent in 2000g (Lange, 2003).

The fisheries management system in Namibia is based on property rights and non-transferable quota allocations. To ensure sustainability, annual Total Allowable Catches (TACs) are set and strictly enforced for each directed fishery. To ensure that Namibians benefit economically, quota levies were introduced to recover resource rent (with subsidies for Namibians), and criteria for allocation of rights of exploitation were established that favoured Namibian ownership - especially Namibians previously excluded under the previous South African regime (MFMR, 2004a.).

Namibia inherited poverty and inequality that can be traced to the pre-independence era, and one that continues to be a huge challenge for the country (Jauch,2012). The Central Bureau of Statistics in Namibia (CBS, 2008) asserts that Namibia is one of the most unequal places in the world with a Gini co-efficient of 0,65, and the inequality is reflected in educational, gender, ethnicity and class. Like other countries with scarce resources such as Asian countries, Namibia is exploring the possibility of using the blue economy as a strategy to

reduce inequality and to economically empower the local communities. It is envisioned that if sustainability and inclusive growth are achieved, the economy at large will benefit from resource efficiency, sustainable business operations and improved well-being. Promoting the sustainability of the blue economy is thus a priority area under the Namibian National Development Plan (NDP5).

In the process of pursuing local empowerment programmes in a resource constrained country like Namibia as opposed to resource rich countries like Norway, it is important to note that the effect of local empowerment schemes may be very different. An important point to note is the close relationship between energy use and climate impact in capture fisheries. Modern industrialised countries are known to be using fossil fuels for energy, whilst resource constrained states are still using synthetic refrigerants in on-board cooling systems, with high rates of leakage. In this instance the additional non-energy related greenhouse gas emissions can be substantial. So this means that an empowerment programme needs to be closely analysed in terms of advantages and disadvantages, to ensure that the end effect on the society is positive and sustainable.

A blue economy can be defined as a “marine-based, environmentally sustainable economic growth and social wellbeing” (Kelleher, 2015). Kelleher alluded to the fact that the stock of natural assets should be maintained as a source of vital inputs and as a sink for wastes. Resources must be used sustainably, and there should always be a plan to replenish stocks as they are being used. Control must also be there so that wastes are not unnecessarily emitted into the environment. (Kahn, 1995). Awareness of the blue economy within the context of development policy is limited, and requires awareness and knowledge broadening efforts at policy level. The need for personal and collective ownership should not be overlooked. There is a particular need to bring in the voices of those traditionally marginalised groups that are often not included in knowledge creation and decision making processes, such as the extreme poor, women and youth (UNECA Report, 2016).

1.2. Problem Statement

In order to empower the people of Namibia through fisheries which are one component of the blue economy, it is important to ensure that the model adopted by the government is able to empower the communities in Namibia and to retain the various species within the ocean. This

study attempts to interrogate how the government through the Ministry of Fisheries balances the objectives of sustainable growth of the fish sector and the economic empowerment of local communities in resource constrained environments. The study seeks to fill this research gap by examining ways in which the management of fisheries can lead to economic empowerment of local communities and sustainable operations of the fishing sector in Namibia.

1.3. Research Questions and Scope

The main research questions attempts to identify the following:

- What is an assessment of the Blue Economy in Namibia?
- Does the Namibianisation policy work?
- How does a country with ocean borders utilize its ocean resources sustainably?
- How will the blue economy in Namibia be transformed to promote economic empowerment of local communities?

This study has focused on the issues of economic and social sustainability as it relates to resource efficiency, sustainable business operations, benefit sharing, inclusive jobs and improved well-being. The study will be guided by the analysis of the regulatory framework that is in existence and any changes that may be needed in this framework to make it more relevant as it speaks to the issues of empowerment and sustainability of the blue economy as a pedestal for growth in Namibia. A detailed dataset is required to address these research questions. In order to have a very detailed analysis, the study will focus on a limited number of cases so that the researcher can probe more deeply into the meaningful characteristics of real life events (Yin, 2003). This will provide more ideal answers to the research questions, with the aim of contributing to the gap in academic knowledge. As a result, the scope will be limited to case studies of Norway where the researcher has conducted a detailed analysis. This excludes other countries in Asia, Africa and Scandinavia.

1.4. Purpose and Significance of the Research

The importance of conducting this research is to find out the effective exploitation means of fish from the ocean in the geographical areas of Swakopmund and Walvis Bay. This research will be useful to policy makers because it seeks to analyse the government efforts to realise a contribution from the fishing industry to its efforts for economic equality in the country. The findings of this research will extend knowledge in the area of the blue economy with specific reference to fisheries in Namibia, and also in the area of empowerment of local communities with clear sustainability of the scarce resources. The findings of this research are more crucial to the management in the Ministries of Fisheries, whose work is involved in the management, research and issuing of fishing quotas in the country, since it will reveal the impacts of fishing quotas. The study will explore various ways to empower the local communities through the fishing sector, and this will serve as a blue print for many individuals and groups that are interested in economic empowerment of local communities. Above all, this study will benefit other researchers who wish to conduct similar studies, as they can obtain background information from the results of this study which will serve as a template to modify their research.

1.5. Research Assumptions

- In the process of carrying out this research, the following specific assumptions pertaining to the study will be made;
- It is assumed that by learning from other countries' best practices sustainable business operations can be implemented in the Namibian blue economy;
- It is assumed that through participatory engagement and agenda setting, resource efficiency will be achieved;
- It is also assumed that at national level Namibia, through participatory policy design and implementation, will achieve benefit sharing that users derive from the blue economy.

The underlying assumption for sustainability and empowerment models is that beneficiaries are adequately informed on how they benefit from the programmes, and thus there is full stakeholder buy-in. The second overarching assumption is that by sustainable use of natural resources, the government can provide for both current and future generations. This research

will touch base on the training which has been provided, or which still needs to be provided, to get the previously disadvantaged communities at par in terms of ownership of the empowerment programmes in the blue economy. This research will also provide recommendations on what can be done with regard to sustainable use of natural resources in Namibia's blue economy.

1.6. Research Ethics

The study was conducted based on the UCT GSB's Code of Research Ethics (UCT, 2015). To avoid plagiarism, all information sources used in the study were duly acknowledged in accordance with the APA referencing style. The study will be structured in such a way as to restrict analysis to the minimum possible, solely to enable meaningful research and to keep within the scope of the study.

2. LITERATURE REVIEW

2.1. Introduction

This chapter aims to explore different views expressed by authors which relate to the theme of sustainability and blue economy. The literature review carried out focussed on an in depth and comprehensive analysis of the different areas researched by different authors, and on identifying gaps that will be covered or addressed by this study. Due to the lack of research conducted in Namibia on the area of study, regional and international reviews will be provided to shed light on the subject under investigation.

2.2. Definition of Blue economy

The strategic meaning of “Blue Economy”, (Piante, 2014).

1. Human needs: helping to secure all people’s need for food, water, energy, materials, recreation and health, as well as jobs, livelihoods, community wellbeing and political stability.
2. Ecosystem sustainability: ensuring that ecosystem goods and services are harvested, processed and used in such a way that this process does not result in any further decline, but rather improvement, of ecosystem biodiversity and productivity.
3. A system approach: applying the tools of systems thinking and modelling and integrated planning in a way that takes into account the inter-linkages between and among different economic activities and ecosystems.
4. Sustainability standards: following global standards and guidelines for sustainable business operations, investment, and financing, and extending refining these where necessary.

The Blue Economy espouses the same desired outcome as the Rio +20 Green Economy initiative, namely: “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP, 2013), and it endorses the same principles of low carbon, resource efficiency and social inclusion, but it is grounded in a

developing world context and fashioned to reflect the circumstances and needs of countries whose future resource base is marine.

2.3. Theoretical Literature

During the 2012 United Nations Conference on Sustainable Development, blue economy was first formulated (Silver, 2015), (hereafter the ‘2012 Rio Summit’). It is a fairly new idea that speaks to the need to maximise the huge potential presented by the ocean, while conserving it. The ocean as a system should not be developed in isolation, but should interact in a number of different ways with other closely interconnected clusters of economic activities that function as an economic system rather than a fragmented collection of individual sectors (UNECA, 2016). Namibia has a huge potential of uplifting its economy that is flowing out of its blue economy; that is why there is an aim to achieve economic empowerment of previously disadvantaged, coupling that with sustainable use of the resource so that it also benefits future generations.

While no two countries are exactly the same, there are a number of examples of a transition toward a blue economy within various sectors of the ocean economy that may be instructive. For example: a) Sustainable fishing practices can in some instances be rewarded with an eco-label that brings a price premium; b) Shellfish aquaculture can augment coastal water quality and inevitably produce valuable seafood that supports employment; c) Offshore wind and other marine renewable energy technologies could generate new jobs and significant additional energy, according to some estimates; and d) Green infrastructure along the coast can both create jobs and protect coastal development (UNECA, 2016). These best practices from other countries can be a starting point for ensuring that resource rent is effectively captured and ploughed back into the development of infrastructure needed for blue economy development. Since there is a learning platform, succeeding in setting up strong pillars for sustainable growth should be a reality in the not so distant future.

The specific concept of the blue economy stems from the realisation that, with the extensive marine areas with which many small island developing states (SIDS) are endowed, the future resource base for such countries is predominantly marine (Manikarachchim, 2014). The global world of finance, investment and increasing pursuit of high return opportunities in the blue economy, if coupled with proper investment policies and frameworks, offers such

countries a chance to appeal to global investors to put capital in key resource sectors (UNECA, 2016). Namibia boasts of being a very peaceful country, therefore proper marketing of the country's blue economy will attract investors in this sector, which then will open great potential doors of development for the country.

Since a large portion of marine resources are believed to have remained untapped or unexplored in different marine zones of the world, there is a widespread conviction that the future source of growth is probably contingent upon the efficient utilisation of those rich ocean resources. This noteworthy per capita ocean resource base alludes to the fact that the blue economy offers the ideal of continued, ecologically sound and all-encompassing cost-effective [blue] growth. As noted by (Mohanty, 2015), 'its importance is realised prominently after the unprecedented contraction of global output and employment affecting the livelihoods of millions of people in different regions of the world'. Many Namibian nationals from previously disadvantaged groups are unemployed. The effective management of the blue economy can open up huge opportunities to change the livelihoods of these people.

African countries have the chance to use marine spatial planning, which is an integrative and participatory process that brings together numerous users of the ocean at different levels to make coordinated decisions about how to use marine resources sustainably. It thus aims to achieve ecological, economic and social objectives that usually have been specified through a political process. Marine spatial planning is thus essential for the successful implementation of the blue economy (UNECA, 2016). All stakeholders in the blue economy can engage in integrative strategic thinking and build sustainable alternative practices in government, business, civil society, and communities (UNECA, 2016). As can be noted from these reports, there is a need to make sure that all stakeholders in Namibia come together to support one another in terms of finance, ideas and any other useful linkages that can be created for the sustainability of the blue economy.

The policy formulation process for the blue economy has the potential to provide a platform for inquiry and policy improvement around the key objective of encouraging multi-sectoral collaboration toward joint transformation action. In implementing the blue economy there are a number of threats that states should guard against. For instance, piracy, as well as rival uses and scarcity of water and other natural resources. Another threat is that a number of maritime and transnational aquatic boundaries are not formally defined. The uncertainty created by undemarcated borders can lead to explosive tensions between neighbouring countries, and

discourage investment (UNECA, 2016). Namibian investors in the blue economy should have discussions with neighbouring countries to avoid conflict, and wherever possible to implement programmes in partnership that may be mutually beneficial and avoid unnecessary costs of duplication.

There are various opportunities that may also arise from the implementation of the blue economy. The Blue Economy provides an opportunity for strengthened public private partnerships which build on existing maritime, lacustrine, and river basin cooperation mechanisms. When fully implemented, the partnerships can bring about a huge step forward in the development agenda of individual countries. The partnerships can also create economies of scale to help address inherent financial, technical, and infrastructure gaps that prevent the realisation of the full potential of the blue economy (UNECA, 2016). Where states manage to enhance opportunities and limit threats, great development potential lies in the blue economy. Namibia should look into partnering with resource rich countries such as Norway, and it can then gain from technology transfer and expertise from those who are a foot ahead in blue economy development policy.

2.4. Sustainable Development Goals (SDGs)

2.4.1. SDG 8, SDG 12 and SDG 14

The SDG 8 promote sustained economic growth, higher levels of productivity and technological innovation, (UNDP, 2015). Hence, encouraging entrepreneurship and job creation in blue economy are key to this, as are effective measures to eradicate forced labour, slavery and human trafficking. With these targets in mind, the goal is to achieve full and productive employment, and decent work for all women and men by 2030 within the fishing industry.

Achieving economic growth and sustainable development within blue economy requires that we urgently reduce our ecological footprint by changing the way we produce and consume goods and resources. The efficient management of our shared natural resources, and the way we dispose of toxic waste and pollutants, are important targets to achieve this goal. SDG 12' encouragement of industries, businesses and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030, (UNDP, 2015).

The SDG 14 aims to sustainably manage and protect marine and coastal ecosystems from pollution, as well as to address the impacts of ocean acidification. Enhancing conservation and the sustainable use of ocean-based resources through international law will also help mitigate some of the challenges facing our oceans, (UNDP, 2015).

2.4.2. Fifth National Development Plan (NDP5)

Our fifth National Development Plan has recently been launched, and through it we aim to achieve inclusive, sustainable and equitable growth. There is no such thing as ‘sustainable growth’, but if we mean growth up to a steady state, where everyone has their means met, then perhaps we can reach some form of fluctuating sustainability.

That said, to achieve this, one of the big buzz words is the ‘blue economy’. It forms a relatively large component of the NDP5, so of course it warrants discussion. What exactly is a blue economy? The Blue Economy has taken on a life of its own, and faces the same danger of becoming ambiguous as many other terms around sustainable development (much like sustainable development and sustainability themselves) have. The label is now commonly used in the contexts of economics, agriculture and conservation. For some (like us in Namibia), the blue economy means the use of the sea and its resources for sustainable economic development. For others, it simply refers to any economic activity in the maritime sector, whether sustainable or not (NDP5, 2017).

While a green economy is linked to effective use of natural resources, the definition of a blue economy relates to healthy marine resources. Oceans are critical to sustaining Earth's life support systems and the billions of people who are dependent on the oceans for livelihoods, food security, and economic development. A sustainable blue economy should provide not just economic, but also social benefits for present and future generations. A blue economy recognizes marine ecosystems as natural capital, and protects and maintains them accordingly. It also aspires to social and economic stability through the use of clean technology and renewable energy. The blue economy is characterized as inclusive, marked by stakeholder participation, well-informed, precautionary, and adaptive, accountable and transparent,

holistic, cross-sectoral, long-term, and innovative and proactive; embedded in systems thinking, (NDP5, 2017).

In Namibia, we have various things on the go that speak to this. For instance, the marine project that is focusing on identifying EBSAs (Ecologically or Biologically Significant Marine Areas). We also have large marine areas designated as protected, and we have an ecosystem management approach to our fisheries sector. Public participation and the precautionary approach put on hold phosphate mining, (NDP5, 2017).

The blue economy approach to managing ourselves around how we utilise marine resources will be an effective and innovative one that looks after our resources to, in turn, look after us and our children. One has to applaud the NPC for integrating this approach into our development, thereby safeguarding one of our important life support systems, (NDP5, 2017).

2.5. Building a Blue economy: Namibia perspective

Oceans are essential to human life. They provide food security and income for millions of people and act as a highway to global trade, (Professor Attri, University of Mauritius). The Atlantic Ocean which covers the entire western region of Namibia has been a remarkable and resourceful element of economic benefits to the richly-cultured Namibian communities. The country benefits from the ocean in a number of ways, ranging from simple household incomes to large scale contributions to the GDP of the country. Among major industrial activities on the coastal area is the fishing industry, which takes credit as the second biggest export earner of foreign currency. It is also the third largest economic sector in terms of contribution to the Gross Domestic Product (GDP), (Attri, 2016).

The great Atlantic Ocean is indeed the 'sea of opportunities', mining activities and international shipments offered by the ocean are economic belts for Namibians. A careful sustainable use of the Atlantic Ocean will extend the harvesting of resources, secure employment and overall support the country's economic growth. Yet determination, studies, planning, surveillance and innovations have to be continuously integrated activities on the coastal environment of this opportunistic ocean, (Economist Intelligence Unit, 2015).

According to Knol, (2010), poverty reduction, social welfare, coastal tourism, water pollution and regional ecosystem management are examples of issues that, due to their broader social or environmental context, may be more challenging to address especially if management bodies operate individually. There is a new approach that unifies all management bodies and incorporates all economic issues in one:-, the Blue Economy approach.

One of the key features of the blue economy initiative is its focus on ocean health as the foundation of broader ecosystem and economic health, (Potts, 2016). The Blue Economy is the approach that links social, economic and environmental aspects concerning the growth, decline and emerging coastal development around the world, and compacts them together as a global communities.

Namibia is no stranger to Blue economy, the approach has already been initiated and is in operation. In 2017-, the University of Namibia held a forum under the theme:-, ‘Climate, oceans and societies: Challenges & opportunities’ that was held at Sam Nujoma Marine Research Centre (SANUMARC) in Henties bay. It was attended by scientists, researchers, Government and private bodies and students, (OECD, 2012).

According to OECD, (2012), the forum was aimed at providing insights into what the Blue economy will deliver if carefully understood, involves everyone and is timely introduced. The forum, which saw presentations from different economic sectors, shed light on the need for different dynamic sectors to address coastal issues as one.

The very informative forum highlighted the importance of first establishing a trusted and diversified knowledge base, complemented by resources which help inspire and support innovation, followed by an engaged process of stakeholders’ consultation and co-creation of a vision for a Blue Economy that can help set appropriate targets and necessary actions. (OECD, 2012).

Knowledge of the marine environment is also a critical need for effective decision making toward a blue economy. Translating new opportunities into productive sectors will require investment in research and development, building technical capacity, and creating the right environment to attract and retain outside investment as a fundamental principle of a blue economy, (Potts, 2016).

Identifying and defining ongoing strategic marine research and information needs in an inclusive and adaptive manner, together with the appropriate funding resources and mechanisms, is essential for achieving economic development through a blue economy framework. This will ensure that the maximum value can be achieved from any resource through sound planning and management, ensuring that the best decisions can be made regarding the balance between economic development and sustainable resource use (Greenhill, 2015).

Namibia can benefit largely from the introduction of Blue economy in its operations. With the focus to reach 2030 as a developed, or close to developed, system, the Blue economy can be the driving tool for the growth, exploration and conservation of the Namibia marine resources. Blue Economy approach will create the trading association between Namibia and other marine communities who have already adapted to the blue economy concept (Greenhill, 2015).

The blue economy as an adaptive operation will fuse in place the necessary policies, legislation, infrastructure, and set up trade associations that will transform, reduce waste and bring maximum gains to the Namibia coastal environment. The blue economy will not only secure profit and long term use, but will also provide for advanced research and innovation that would add to the already existing knowledge of the Atlantic Ocean (OECD, 2012).

The Namibian government can adapt the blue economy with the objective to increase economic development of marine areas in the future and attract potential investors. With the blue economy, the Government can easily coordinate institutions for integrated coastal and ocean management, established and implemented across relevant sectors such as fisheries, tourism, transport, energy and environment (OECD, 2012).

2.6. Blue economy: Opportunities, Blue growth and Benefits

2.6.1. Fisheries

The current state of the Namibian fishery is not very promising; the potentiality of it to continue generating revenue and secure food over a long time is questionable.

The management of these fisheries has long been on single-stock assessments. The fisheries also struggle to limit and bring under control many fishing problems. Roux & Shannon (2004) observed that only a few implemented management measures, such as the minimum depth limit for bottom trawling, or size selection devices in cod ends, or were motivated to limit the bycatch of juveniles or other non-targeted species.

The management, however, has mentioned the intention to implement an ecosystem approach to fisheries (EAF) where all measures, including trophic interactions, competition or predator-prey relationships, are taken into account in the management procedures. Yet in 2017, Namibians have witnessed another closure of a fishery stock and, a decrease in canned fish, with many losing their jobs in this sector. Without effective changes and new operational approaches such as the ecosystem based, the Namibian fisheries could face challenges in the future. The implementation of integrated, ecosystem-based approaches based on the best available science in a precautionary context, plus the removal of fishery subsidies that drive overexploitation, offers the prospect of restoring key stocks and increasing catches, (The Blue economy concept paper, 2014).

There is a need to move away from the sectorial and species-based approaches, which characterize Namibia's current approach to managing the marine environment. Ecosystem approaches need to be further refined and made operational (Patil, 2016).

2.6.2. Shipping and Port facilities

The Namibian port authority is among major African natural gateways to international trade. Two ports (Walvis Bay and Luderitz) are both world class, secure, efficient and reliable because of their advanced infrastructures. They also give shipping access to countries like Zambia and-, Zimbabwe, thereby generating benefits.

The Namibian Port Authority must continue its commitment to the principles of openness, integrity and accountability, and the directors recognize the need to conduct the business of the Authority in accordance with good governance and internationally accepted accounting practice.

Maritime trade is set fair for growth and economic benefits, whilst reducing impacts, offering expanding Blue employment opportunities for the foreseeable future, (The Blue Economy concept paper 2014) Shipping and Port facilities.

2.6.3. Tourism

Coastal tourism in Namibia offers holiday destinations for all individuals across the world, consistently throughout the year. The coastal towns of Swakopmund, Walvis Bay and Henties Bay are centres for tourists searching for both the ocean and desert sensation. It has been one of Namibia's huge contributors to the country economy and GDP for many years.

With two unique environments meeting together, the coastal areas of Namibia could boost billions of dollars for many years to come. More exciting developments can increase the number of visitors to these coastal towns, yet the sensitivity of both the desert and the ocean has to be considered. The best approach will be planning under Blue economy consensus where ecotourism is defined and eco-friendly materials are used.

A Blue Economy approach, where ecosystem services are properly valued and incorporated into development planning, will further advance this transition, guiding tourism development and promoting lower impact activities, such as ecotourism and nature-based tourism, where the natural capital is maintained as an integral part of the process, (The blue economy concept paper 2014).

2.6.4. Mari-culture and Aquaculture

The industry of Mari culture on the coast of Namibia is almost dominated by oyster and mussels farming, followed by the culture of some marine species, such as Silver Cobs,

in ponds. The industry has not been entirely successful for many years, with lot of farmers losing their investment to sulphur blooms' killing millions of oysters.

Aquaculture on the coast is newly practiced, and exists only in research facilities such as SANUMARC, where full control of climate is monitored. Yet the potential of Mari-culture and Aquaculture on the coastal towns can generate great revenue, and secure food at subsistence level, but the risk is way too big to take. With less or limited monitoring equipment of climate and oceanic changes, the turn-around of sulphur is less predictable and cannot be avoided.

Aquaculture under the Blue Economy will incorporate the value of the natural capital in its development, respecting ecological parameters throughout the cycle of production, creating sustainable, decent employment and offering high value commodities for export, (The Blue economy concept paper 2014).

2.6.5. Education and Research

It is essential to have adequate, updated information concerning the exploitation of the ocean resources. Ocean planning and management decisions should be based as far as possible on the best available information on the natural, social, and economic processes that affect ocean and coastal environments, (The Blue economy concept paper, 2014).

Researches and educational activities can collect resourceful data that can be used to plan developments on the coast and show climatic patterns that affect the ocean. The blue economy approach emphasises the need to have knowledgeable control over a large scale of the coastal environment, including the communities and terrestrial environment meeting the ocean. With annual researches and communication between different research bodies, the Namibian coastal environment can be monitored from land water station, be conserved according to findings and developed through environmental sound systems.

When adequate information and knowledge are not available, decision makers should take a precautionary approach; actively seek to develop such knowledge, and refrain from undertaking activities that could potentially lead to harmful effects, (The Blue economy concept paper, 2014).

2.7. Importance of public private partnership (PPPs) and multi-stakeholder partnerships within the Blue Economy

2.7.1. Government and PPPs

Governments are the shepherds of the PPP process, giving them a joint responsibility. First, they must create the enabling environment in which blue economy partnerships can emerge, and second, they must develop sufficient regulatory and assessment capacity to ensure that projects actually provide a public good within the blue economy (Olsen, 2009).

First, governments must be able to correctly identify and select blue economy projects where PPPs may be viable (Jomo, 2016). Research shows that PPPs in blue economy often suffer from an “optimism bias,” as both sides of the partnership have an incentive to strategically overestimate demand for the project (Romero, 2015).

Second, governments must have the ability to structure contracts that ensure appropriate pricing and transfer of risk to private partners within blue economy projects (Jomo, 2016; Murphy, 2008). The nature of large PPP in blue economy projects poses a considerable risk to governments. For example, in the health sector there is often a public perception that the state should ensure service delivery. If a project fails, which is not an infrequent occurrence, then the government may be forced to rescue the project, shifting private debts onto the public books (Romero, 2015).

Finally, governments must establish comprehensive and transparent accounting and reporting standards for PPPs in blue economy (Jomo, 2016). A key metric for governments to take into account when quantifying the success of a PPP in the fishing sector, for instance, should be its effect on public fishing outcomes (NASEM, 2016). The development of PPPs in and of themselves should not be seen as an outcome, but rather as a process and an output toward a social good (Nishtar, 2004). Although social indicators are often difficult to quantify, they must be the ultimate indicator for the success of a project.

2.7.2. The Private Sector and PPPs

The UN has identified private business as essential to the achievement of the 2030 Agenda, in part because the private sector offers an attractive source of funding for a plan that is well out of reach for national governments acting alone, and in part because the activities of private enterprise are entwined with the daily lives and development outcomes of people everywhere. To align themselves with the ambitious agenda put forward for Africa and the world, businesses must learn to go beyond philanthropy and voluntary corporate social responsibility (CSR) toward inclusive and sustainable businesses models within blue economy, all while maintaining profitability (Neto and Riva, 2015). This is no small challenge.

The very first and simplest way that business can contribute to the blue economy agenda is by following the principles of good business: obey the law, observe core human rights and labour standards, do not pay bribes, pay taxes, and be transparent and accountable (Evans, 2015). Beyond these basic steps, it becomes useful to focus on specific examples of private-sector involvement in the development process. PPP discussions are often too broad and abstract to be of any immediate use to business. Instead, dialogue between government agencies and businesses should concentrate on analyzing other existing partnerships, and how they might be adapted or learned from for current projects (Evans, 2015).

Ultimately, however, it is important to remember that economic activity cannot be easily redirected to where the need is greatest. The private sector flourishes where the right conditions and opportunities exist, but if those are absent it will not drive inclusive growth (IHRB, 2015). Also, despite proclamations of support for the SDGs or Agenda 2063, companies are not beholden to any development agenda. Government can strongly encourage them, and often will have to oblige them, to adopt practices consistent with sustainable development. While the transformative potential of business is clear to all, other partners should be careful not to treat it as a silver bullet to achieving development. Many countries still lack the right kind political, economic, and social structures to make this transformation possible (IHRB, 2015).

2.8. Understanding of nationally defined priorities, social context and resource base

A more robust tactic, based on a more informed viewpoint of nationally defined priorities, social perspective and resource base, can guide viable and comprehensive blue growth (Benkenstein, 2015). He also noted that governments now see the need to obtain more information regarding biophysical features, carrying capacity, synergies or trade-offs between sectors to guarantee an efficient and sustainable management of different activities. The Namibian policy makers must therefore recognise the need to synergise their activities in the blue economy if inclusive growth is to be achieved. They must invest in research so that blue economy development can be at the same level with other countries, which are already reaping huge profits from the blue economy sector.

Marine and coastal spatial planning and integrated maritime surveillance are needed to give authorities, businesses and communities a better picture of what is happening in this unique space (Conathan and Moore, 2015). Their strong point was that numerical mapping of oceanic and coastal space and natural assets can then be the foundation for cross-sector analysis and planning in order to prevent clashes and avoid negative spill-over effects. This can help countries such as Namibia to achieve policy coherence and unity of purpose in the blue economy. Even though it is important to have empowerment programmes, it is also crucial not to harm the environment in the process, which would ultimately be detrimental to the same community that is being empowered.

In the same vein, the increasing popularity of data constrained stock assessments can provide immense insight that is crucial for better fisheries administration. In places such as South Africa and Indonesia, mobile technology is being tested to gather previously unavailable data, for example on fishery landings and fish stock health (Conathan and Moore, 2015). Such best practices implemented in other places can be used as a benchmark by Namibians in crafting appropriate strategies to get the most out of the Namibianisation policy. There is a need, though, to be cautious, as situations are different in terms of country size, funding, resource base and human capital capacity.

2.8.1. Integrated coastal zone management

Combined seaside zone organisation can inevitably boost the preservation of coastal and near shore natural resources while increasing the efficacy of their uses. Coastal zones are among the most productive areas in the world, offering a wide variety of valuable habitats and ecosystems services that have always attracted humans and human activities. Coastal zones are also among the areas most vulnerable to climate change and natural hazards. Risks include flooding, erosion, sea level rise as well as extreme weather events. These impacts are far-reaching, and are already changing the lives and livelihoods of coastal communities. In Namibia, when crafting policy, one has to be wary of the effects of climate change and extreme weather conditions. If properly planned and anticipated, the effects of such hazards can be minimised.

As opposed to sectorial approaches that can lead to incoherent decisions, ineffective resource use and unexploited opportunities. Integrated Coastal Zone Management (ICZM) seeks to coordinate the application of different policies affecting the seaside zone and oceanic activities. ICZM is an iterative process which includes a variety of tactics, from mapping and demarcation of the risk lines and seaside residue cells, to enhancing the ability of stakeholders to make informed decisions about growing the blue economy within the capacity of its living natural resource base (Dakora and Bytheway, 2014). Namibia can be used as a test tube to find out why countries are failing to implement sustainable blue economy frameworks if they have such information at their disposal.

Building the capacity of the blue economy also demands evaluating the value of maritime resources. Not only are marine living resources poorly measured and understood, they are also rarely valued properly. In Mauritania, for instance, research showed that the value of fisheries and other renewable oceanic resources was much higher than that of the minerals upon which the Government had formerly based most of its oceanic resource management decisions. Understanding that in comparison with mineral resources, marine living resources are:

- a) Of much higher total value, and
- b) Renewable, the Government adopted an alternative approach to development based on realising the long-term potential for blue growth (European Commission, 2015).

If well-coordinated, the goods and services produced from marine ecosystems could make a much bigger contribution to reducing poverty, building robust societies, nurturing strong economies and feeding over 9 billion people by 2050. For example, the World Bank's 2016 *Sunken Billions Revisited* study indicates that if fisheries are properly managed, with a substantial reduction in overfishing, it could avail an additional US\$83 billion to the global economy each year. Namibia's fishery is one of the richest in the world, based on a dynamic eastern marine boundary outpouring system, the Benguela ecosystem. In this light, then, it has the potential to make a much bigger contribution to reducing poverty and empowering-Namibians.

2.8.2. A healthy, resilient and productive marine environment

A vital building block of the blue economy is that the health of the oceans is intricately linked to the sustainability of economic livelihoods for seaside societies and the economy as a whole (Commonwealth Secretariat, 2013a). The paper also says that the oceans provide a range of essential goods and services that would be extremely costly to restore or replace once lost. For SIDS, in particular, the health of coral reefs and associated biodiversity is of critical importance, both from an environmental and economic perspective, due to the strong reliance of SIDS' economies on the tourism and fisheries sectors. Thus, effective management of the marine environment and the maintenance and restoration of ecosystem health and integrity is fundamental to ecologically sustainable development.

2.8.3. Infrastructure

Coastal and port infrastructure are critical assets that serve as catalysts of economic growth and development in SIDS, since SIDS rely heavily on coastal tourism and fisheries, and are almost entirely dependent on maritime transport to facilitate global trade (UN Economic Commission for Africa [UNECA] 2014). In many SIDS, tourism resorts, coastal towns and infrastructure are at risk, given their location at or near present sea level and their proximity to the coast. Investment in coastal infrastructure, improvements and a better-integrated approach to planning will afford the tools to help minimise hazards of flooding and erosion, and investments in coastal infrastructure and to optimise performance. There is therefore a need in the crafting of appropriate strategies to ensure that there is a targeted effort to finance

infrastructure development in Walvis Bay and Swakopmund to ensure the sustainability of the fisheries project.

2.8.4. Education and capacity building

A lack of education and training in many SIDS leads to chronic gaps in their technical capacity for marine research, planning and decision-making. Identifying future skills, needs and labour market supply and demand trends, and adapting and developing existing education, vocational and professional training programmes to meet them, will be essential if the blue economy is to become a reality in SIDS (Ababouch, 2015). A more coordinated focus between the existing research and educational facilities may well prove beneficial in terms of addressing key gaps in research skills and capacity building, but ultimately a more comprehensive research strategy is likely to be required if SIDS are to fully realise the opportunities presented by the blue economy (Robinson, 2015). If the communities are adequately informed, they will stop dumping unnecessarily and polluting the water, and they will value the worth of the fisheries not only for this generation but also for future generations. In crafting appropriate strategies for the Namibian economy, it must be taken into account that there will be a need for targeted trainings, follow up and support before the blue economy can be truly sustainable.

In crafting the best policy for Namibia's blue economy, it would be beneficial to learn -from best practices of other countries, of course with adequate adaptation of the strategies to suit Namibia and the present state of its economy.

2.9. Best practice for blue economy management in Namibia

A coastal state's exclusive economic zone is a special maritime zone that is outside but contiguous with its territorial sea. The EEZ is not, therefore, part of the state's territory and subject to its sovereignty, unlike the territorial sea, which is an ocean area contiguous with its land territory and internal waters. The legal regime for the exclusive economic zone is enshrined in the UN Law of the Sea Convention of 10 December 1982. The zone can extend up to 200 nautical miles from the baseline on which the territorial sea is measured, unless it collides with another state's jurisdiction (MFCA, 2013). In realising the benefit of having an exclusive economic zone', Namibia also has a Territorial Sea and **Exclusive Economic Zone**

of **Namibia** Act 3 of 1990. The objective of such a zone is to outline the territorial sea, interior waters, contiguous zone, exclusive economic zone and continental shelf of Namibia. The benefit of the exclusive economic zone is that Namibia has more control over its maritime activities and can therefore freely implement programmes for inclusive growth targeting its disadvantaged population.

Namibia has a National Marine Information and Research Centre (NatMIRC) located in Swakopmund and Namibian Maritime Fisheries Institute (NAMFI), both providing training for professionals in the sector. The critical element that is needed, then, is to ensure adequate resourcing of such organisations. Regular monitoring and evaluation is also critical to ensure that the set out mandate is still being carried out. If this research is carried out successfully, it can be a much needed anchor for sustainability of the blue economy.

2.10. What the Namibian Government did in utilising the blue economy

The Namibian government, through legislation intends to ensure that the exploitation of marine resources is not only done in a sustainable way, but that it also addresses the government's social policy objectives of empowering local people and thereby reducing poverty. It is possible that if the strategy is implemented correctly, it can lead to a successful development of entrepreneurship in the fisheries sector and possible improvements in livelihoods among the disadvantaged local communities.

The key official document for the fisheries management in Namibia is the Sea Fisheries Act of 1992. The Sea Fisheries Act 1991 provides for rights to exploit marine resources and for the allocation of quotas in respect of particular species. The criterion for the allocation of fishing quotas was based on the following criteria: nationality was taken into consideration, with Namibian nationality being given first preference. If the applicant for the fishing quota is a company, then the advantageous control of the company had to be vested in Namibian citizens.

2.10.1. Namibian Blue Economy Institutional Framework

Blue economy in Namibia is under the MFMR, set up in 1990, with the mission of strengthening Namibia's position as a leading fishing nation and contributing towards the

achievement of economic, social and conservation goals for the benefit of the country. The MFMR has four Directorates: the Directorate of Resource Management (DRM) responsible for scientific research and advice; the Directorate of Operation and Surveillance (DOS) responsible for monitoring, control and surveillance; the Directorate of Policy, Planning and Economics (DPPE) responsible for planning activities, which includes advice on socio-economic issues for policies and legislation; and the Directorate of Aquaculture.

2.10.2. The Namibian blue economy management system

Foreign fleets dominated coastal waters before Independence. Uncontrolled fishing took place. Spanish, Soviet, Portuguese, South African, Rumanian, Polish and Bulgarian vessels contributed to a severe reduction of all major fish stocks (Nichols, 2004). The South African occupation regime also controlled all of Namibia's inshore marine resources, leaving Namibia with depleted fish at the time of its independence (Nichols, 2004). Shortly after independence, the newly elected government quickly founded the MFMR, a governmental blue economy administration organisation, which is mandated to sustainably manage the living aquatic resources and promote the aquaculture sector (MFMR, 2010). The policy framework that was created then emphasised sustainable utilisation of the blue economy. Four main strategies were crafted to ensure a long lasting contribution to the country's economy through fishing as one of the contributing factors (Nichols 2004).

The four crafted strategies are as follows:

- rebuilding fish stocks through the use of up to date research facilities and methods, monitoring territorial waters and conservative fishing effort levels;
- building a domestic processing industry;
- Namibianisation, a policy stating that the government would make sure ownerships of companies, vessels, and new jobs were passed on to Namibian citizens; and
- empowerment, making sure all social groups are represented in the industry, especially the previously disadvantaged.

Since then fish stocks have stabilised and by maintaining and carefully executing conservative management policies, the government is hoping to restore much higher levels, last seen in the 1960s (Lange, 2003). The Directorate of Operations of the MFMR showed successful work with monitoring, control and surveillance (MCS) and the system has gained a solid reputation

as being one of only a few well-functioning MCS systems in Africa (Bergh & Davies, 2004). Twenty-three onshore processing plants were built between 1990 and 2003, employing about 8000 people of whom nearly all were Namibians (Nichols, 2004). On board the fishing vessels there were about 5600 people employed in 2003, of which 68 per cent were Namibians, adding up to a total of 13 500 people working in the sector.

Extending and taking control of the EEZ at independence has had a significant impact on Namibia's national wealth (Lange, 2004). Bringing the blue economy under national control contributed to an increase in wealth between 1980 and 1998, which Namibia otherwise would not have experienced. As the value of natural capital is quite volatile, changes in natural conditions and on international markets make the blue economy contribution to the Namibian economy unpredictable. After independence, blue economy contribution to GDP has been fluctuating, with a slight decrease from 5% in 2009 to 4% in 2010 (MFMR, 2010).

Since the 1980s the blue economy production in Namibia has decreased slightly, particularly since 1993, which leads to the assumption that the increase in contribution to GDP has been gained from an efficient management regime of the fishery. The blue economy sector in Namibia has since independence consistently been the second largest export sector (NPC, 2011).

Many African countries fail to manage their resources efficiently, and thus do not become more integrated in the global value-added chain. (Meyn, 2005), research established that when many African countries export mainly unprocessed fish, Namibia has continued at least to present value added fish and fishery products to the international market. Fishing rights are currently subject to the 7, 10, 15 and 20-year conditions in Namibia.

It was a positive sign that people did not only enter the fishing industry for the sake of a business venture, but also to contribute to the economy and development of the country. For the fishing industry to contribute to development, there needs to be investment in infrastructure and human development, vessel upgrading and social contributions. According to Elago, (2004), some fishing rights holders had failed to keep the promises made in their initial application and seemed interested only in short-term financial returns by 'selling out' their quota to others and not creating new jobs.

2.10.3. The granting of fishing rights by the MFMR

From the conditions of granting fishing rights, the MFMR looks at investment in onshore processing plants and vessels. The rights are also granted in accordance with the Namibian citizens' shareholding (by percentage) in large venture companies. When the proportion of Namibian citizens is great, there is an enhanced chance that longer-term rights will be approved, Elago, (2004), maintains that lack of capital and collateral to buy vessels or processing machinery to be granted longer-term rights is a problem in the Namibian fishing industry. Even if capital markets were perfect and loans were granted on equal terms, operational costs would be higher as a result of a lack of experience among the Namibians.

2.10.4. Contributions to the Gross Domestic Product (GDP)

The level of output in the fishing sector can be assessed by looking at its contribution to GDP. Over the past several years, the fishery sector has positioned itself as one of the major contributors to GDP. The sector's contribution to GDP is essentially the gross income earned, wages and salaries, gross profits and indirect revenues from fish production. It does not include the value of intermediary inputs, and it is therefore much less than the value of production. Table 1 below shows the estimates of the contribution of the fishing sector to GDP at current prices, from processing on-shore and fishing and fish processing onboard. The revised figures were estimated using rebased prices of 2004 from the previously used base year of 1995. The fishery sector contributed 4.6% in 2009, compared to 3.7% contributed in 2010, representing a 20% reduction (MFMR., 2010).

Table 1: Contribution of the fishing industry to GDP (current values in \$ millions)

GDP Contribution	2006	2007	2008	2009	2010
Fishing	1,948	2,330	2,411	2, 523	2,177
Fish processing	657	903	993	950	785
Total contribution	2,605	3,232	3,404	3,473	2,962

Percentage of GDP	4.8	5.3	4.7	4.6	3.7
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The high costs of fishing had a negative effect on the fishing companies, as they had to dig deeper into their pockets. The favourable exchange rate against the American dollar (US\$) and the euro (€) during the last two quarters of 2008, saw Namibia earn foreign gains from its fish and fish products. Generally speaking, prices for 2008 have shown an improvement, although reductions were noticed in some fisheries; i.e. a reduction was observed in tuna pole and long line prices (MFMR, 2010).

2.10.5. Policy or Legal Framework in the Namibian fishing sector

Policies and legislation adopted by government after independence must be seen in the context of the Namibian Constitution, which states that: “The state shall vigorously promote and preserve the wellbeing of the people by adopting, inter-alia, policies aimed at the following:

Steady planning to increase and uphold a satisfactory level of nourishment and standard of living of the Namibian people and to improve public health;

...1) conservation of environments, vital ecological practices and biological diversity are maintained and living natural resources are consumed on a sustainable basis for the benefit of Namibians, both present and future” (Article 95 – Promotion of the Welfare of the People).

“Land, water and natural resources underground and above the surface of the land and in the mainland and within the territorial waters and the select economic zone of Namibia shall belong to the state if they are otherwise lawfully possessed” (Article 100 -Sovereign Ownership of Natural Resources) (The Namibian Constitution, 1990).

2.10.5.1. The 1991 White Paper “Towards Responsible Development of the Blue Economy”

In terms of policy formulation relevant to blue economy management in Namibia, the Ministry of Fisheries and Marine Resources soon after independence issued the 1991 White Paper “Towards Responsible Development of the Blue Economy” (MFMR, 2004). It had two main objectives:

- 1) To prevent depletion of species and rebuild stocks decimated during the colonial period and
- 2) Maximize benefits for Namibians, both the harvesting of fish and in the processing industry. This policy is currently under review and has been renamed “Towards Responsible Development and Management of the Marine Resources Sector”.

2.10.5.2. Marine Resource Act (MRA) No. 27 of 2000 and the regulations relating to the exploitation of Marine Resources (2001)

This Act was enacted by Parliament in 2000 and enforced on August 1, 2001. The Act replaced the Sea Fisheries Act of 1992, and deals with the harvesting and commercial exploitation of marine fisheries resources. The Regulations Relating to the Exploitation of Marine Resources (2001) promulgated under this act replaced the Sea Regulations of 1993. One vital feature under this piece of legislation was the establishment of a permit system for recreational fishing as a measure to protect and conserve coastal fish species.

These laws identify only two types of fishing: commercial and recreational. However, in terms of the definitions, “‘recreational purposes’ means for the purpose of sport, leisure or subsistence” (MFMR, 2001 – Regulations Relating to the Exploitation of Marine Resources, Part I - Definitions) (MFMR, 2004a.).

The Minister of Fisheries and Marine Resources issues the commercial fishing rights almost exclusively to Namibian companies. Applications are screened by a high level committee within the Ministry which considers, inter alia, the shareholding of the company, its record in the fishery if any, projected employment and other economic benefits. Only right-holders are entitled to participate in a fishery, and in the major fisheries are allocated a proportion of the Total Allowable Catch.

2.10.5.3. Aquaculture Policy 2001

The Government of Namibia views aquaculture development as a priority area. The current policy of this developing sector is laid out in the policy paper “Towards the responsible Development of Aquaculture (MFMR, 2010). Marine species such as shellfish and finfish and fresh water species such as Tilapia and Catfish were identified as having potential for aquaculture. The Government foresees that the role of aquaculture is to enhance food security, reduce poverty, create employment, improve rural livelihoods and increase investment.

2.10.5.4. Namibianisation

The Namibianisation of the fishing industry intended to benefit those Namibians who had ‘been socially, economically or educationally disadvantaged by discriminatory laws or practices’ in the past. To achieve this, the government used the granting of rights of exploitation and the allocation of quotas to Namibian operators (MFMR, 2010).

By 1994 it is claimed that 70% of right holders were ‘wholly owned Namibian businesses’ and ‘23% were majority Namibian owned’. The 1991 White Paper “Towards Responsible Development of the Blue Economy” can thus be seen as part of the Namibianisation of the fishing industry, in promoting employment of Namibians in fishing and processing as well as in associated support and service industries (e.g. boat building, gear production and repairs, can making, distribution and marketing) and in also seeking to export value added products (Elago, 2004).

According to Elago (2004), the declaration of an EEZ and thus of vastly expanded fishing grounds also provided the opportunity for the Namibian government to use the blue economy for redistributive purposes to address the large socio-economic inequities inherited from apartheid-rule. This would allow government to use the developmental potential of the blue economy to give impetus to other government policies in which poverty alleviation was identified as a national objective. The government policy on investment can also be seen as a measure that, by attempting to attract foreign direct investment through a range of incentives, tried to encourage manufacturing, exporting and job creation in different industries in Namibia, including the fishing industry (Elago, 2004).

2.11. Sustainability development outcomes of the blue economy

The blue economy concept is built around the sustainable use of marine resources, and with support from the Commonwealth Secretariat many countries are now gauging the potential economic value of their deep-sea waters. However, for this to be an effective development policy, it should factor in the unique structural challenges of small states and better contextualise recommendations. The concept is still evolving, but the key sectors for small states include fishing, maritime transport and tourism, (Ababouch, 2015).

2.11.1. Fishing

Fish and processed fish merchandises are a crucial subset of the blue economy in most small states. As a percentage of total exports, SIDS contributes just over 1 per cent to world production of fish and fish products. However, fisheries account for 3 per cent of GDP in SIDS, but for some small states this figure can increase to more than 10 per cent (UNCTAD., 2016). There is a regional difference between countries, with four of the top five exporting Commonwealth small states from Africa – Namibia, Mauritius, the Seychelles and the Maldives, while the bottom five are from the Caribbean. Export revenues from fish products has been steadily increasing for the top five commonwealth small states but plateaued after 2012, while in contrast exports from countries in the lower end and have been characterised by sharp fluctuations in exports, (UNCTAD, 2016).

Going forward, the importance of fish and fish products to small states both as a source of protein and contribution to GDP is likely to continue. However, based on their measured capacity and increasing world-wide demand for fish products, small countries have the potential to further develop and grow this sub-sector of the blue economy. For example, fish and fish products exports from Pacific SIDS have the potential to contribute between 30 and 80 per cent to GDP given the potential economic value of their large EEZs (Ababouch, 2015). Fully realising this, however, will require an enabling policy and regulatory environment that ensures domestic firms participate in sustainable harvesting of local and regional fish stocks, (UNCTAD, 2016).

2.12. Transforming fishing sector to promote economic empowerment of local communities

2.12.1. The scope of the blue economy can be different depending on the sectors considered

Economic segments using oceans and inland waters comprise fisheries, aquaculture, tourism, shipping, biotechnologies, maritime security, mining, oil and gas, and renewable energy. These various sectors have a direct impact on the aquatic ecosystems, and the fauna and flora they sustain. The aim of an overarching blue economy framework should therefore be to assess ways and means to mitigate the cumulative impact of these economic sectors on the living marine resources and ecosystem services. In various coastal third world economies, blue economy structures have been put in place to stimulate at the initial stages food security and decent livelihoods. Such approaches generally include fisheries, aquaculture, ecosystem services, and marine and coastal tourism, with the potential for future integration of other important sectors as appropriate, (Ababouch, 2015).

The challenge is where to begin in order to change course to attain a blue economy, and in so doing to develop or reinforce social, economic and environmental connections and reform current governance activities. This will require some fundamental changes in the way the ocean is managed at the national, regional and global scales to create a more harmonised and integrated approach. While it is clearly recognised that the ocean offers further potential for economic benefits to be derived from the sea both from living and non-living resources, it is not always clear what a sustainable ocean economy should look like, and under what conditions it is most likely to develop (Economist Intelligence Unit, 2015). In order to achieve this, two areas of focus are necessary: Improve and optimise the economic returns from existing activities and resource utilisation; and explore opportunities for the development of new economic sectors.

2.12.2. Optimising returns from existing activities

The list of sectors relevant to the blue economy is very wide, and the potential of the oceans is manifold and complex. The potential exists to more effectively exploit many of the existing

resources and to optimise returns from existing activities. Opportunities to further develop and utilise existing sectors as a means to create jobs and to increase the value of those sectors therefore need to be assessed in the context of the blue economy. In the specific case of SIDS, this will most likely relate primarily to coastal and marine tourism and capture fisheries (Ababouch, 2015).

2.12.3. Explore opportunities for the development of new economic sectors

In terms of future uses of the oceans, a number of new and emerging opportunities have been identified that can contribute to the development of the blue economy. Among these emerging opportunities having particularly strong potential in small states are fish farming (aquaculture), ocean-based renewable energy, ocean-related tourism and marine biotechnology (Robinson, 2015).

2.13. Summary of the literature reviewed

In this chapter literature that is related to the blue economy and sustainability development was reviewed. Namibian policymakers may thus need to look into the need to establish and properly equip such an exclusive economic zone in the Walvis Bay and Swakopmund area. Namibia should thus look into its existing policies to see if they need polishing, and more importantly, implementation and monitoring of such should be enforced.

Another point emerging from the literature reviewed is that the previously disadvantaged communities should be involved in the formulation of policy, as they know where their problems lie. Namibia has a quota system in place. It is important to note, however, that the quota systems are very different. The Namibian quota system is based on the number of years. This difference brings about challenges in a one size fits all policy, as the frameworks in place are providing for different things. There is also a need to ensure the absence of corruption in ensuring the correct operation of the quota systems

There is evidence that Acts are in place to regulate fisheries in Namibia. In Namibia, fisheries are regulated by the Sea Fisheries Act of 1992 and other legislation. It is clear from the literature reviewed that there is a need for a concerted effort using a multi sector approach to

fully utilise the blue economy in a sustainable way, as this will avoid duplication and overstepping of boundaries.

It is also becoming evident that it is important to ensure that there is continued research and monitoring of fisheries resources. Governments can make use of existing structures but may bring about a great change if a results based approach is undertaken. The investment in appropriate infrastructure is also critical if disadvantaged communities are to be adequately empowered to be major players in the blue economy.

Despite having different approaches, both case studies provide great insights which will guide the researcher in carrying out this study. This is the launch-pad that will be used to inform and help to guide in what may be required in the Namibianisation policy, and achieve sustainability and empowerment of its previously disadvantaged communities. The following section shall explore the situations that arose around the promotion of sustainability development of the blue economy by the Namibian government. It will begin by highlighting the methodology adapted and later explore the data findings and the conclusion of the study.

2.14. Conceptual Framework

Since knowledge in the area of the blue economy with specific reference to fisheries in Namibia can still be extended, this research uses various linkages to show how empowerment of local communities can be jointly achieved, with clear sustainability of the scarce resources. The pillars needed to ensure the realisation of this dual objective include:

- Multi stakeholder consultation to ensure participatory research design, policy coherence and to avoid duplication of efforts
- Enforcement and monitoring of Namibianisation policy because policies only become useful when properly implemented not when well written.
- Education of the previously disadvantaged groups to develop community buy in and support, without which sustainability cannot be achieved.
- Promotion of multi sector partnerships

If all the above can be carried out effectively, it is envisaged that inclusive growth can be achieved in Namibia. With a set platform, Namibia could then also enjoy the benefits of resource efficiency, sustainable business operations, inclusive jobs and improved well-being.

3. RESEARCH METHODOLOGY

3.1. Research Approach and Strategy

The qualitative inductive research approach was seen as appropriate for developing theme on how to implement inclusive and effective economic and social sustainability programmes in the blue economy. Qualitative research is relevant as the focus of the paper is through interpretation rather than quantification (Yin, 2003).

An inductive approach is ideal due to the relative absence of a robust theme. As such, the case studies will be used as the starting point of the generalisations that will be deduced (Ritchie, 2013). Inductive research is ideal when summarising the data collected from interviews into contextualised conclusions. It is particularly relevant for identifying underlying structures from the data collected during the interview process. Following this ideal, the themes and structures are developed from the data that is gathered within a broad framework.

Therefore, with a qualitative case study, this study was able to make an assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay. And also, this design has enabled this study to solicit possible suggestions from the respondents to address the situation in order to improve the effective delivery of the Blue Economy in Namibia.

3.2. Research Design

A research design is defined “as the framework that has been created to seek answers to research questions (Creswell, 2007)”. Nieuwenhuis (2016) defines a research design “as a plan or strategy that moves from the underlying philosophical assumptions to specifying the selection of participants, the data-gathering methods to be used and the data-analysis to be done”.

The research was descriptive and was aimed at collecting qualitative as well as quantitative data through a series of questionnaires with the Ministry of Fisheries and Marine Resources employees and previously disadvantaged people in Namibia. In addition to this, a stratified proportionate random sampling was adopted to reach 40 previously disadvantaged people in Namibia with respect to the gazette published by the Ministry of Fisheries of groups that had

secured fishing quotas for 2014. The research has focused on a combination of primary and secondary sources to draw a conclusion on the data collected.

3.3. Sampling

Leedy and Ormrod, (2010) define a sample as the total number of units selected from population. This study included Ministry of Fisheries and Marine Resources employees and previously disadvantaged people in Namibia. In addition to this, a stratified proportionate random sampling was adopted to reach 40 previously disadvantaged people in Namibia, with respect to the gazette published by the Ministry of Fisheries of groups that had secured fishing quotas for 2014. The four groups each had ten members, adding up to 40 interviewees and 10 people were also selected on the basis of purposive sampling to take part in an interview at the Ministry of Fisheries and Marine Resources. The total sample was made up of 50 interviewees.

The participants were chosen either on the basis that they were beneficiaries of the government Namibianisation policy in the fisheries or they had knowledge of the policies regarding an assessment of the Blue Economy in Namibia, especially in relationship to fishing, and Namibianisation of the sector by virtue of working for the Ministry of Fisheries and Marine Resources. This sampling technique enabled the researcher to approximate the general population structures with greater fastidiousness, and warrants a more illustrative sample to be derived from a comparatively similar population. The researcher used a purposive sampling technique to select the Ministry of Fisheries and Marine Resources employees who are the professional watchdogs of the blue economy resources, and a random sampling technique to reach the 40 previously disadvantaged people of Namibia. The completed interviews were transcribed and analysed in detail in order to find recurring patterns and differences of opinion amongst participants.

3.4. Data Collection, Frequency and Choice of Data

The data was collected for this research using focus group interviews and individual interviews. According to (Welman, Kruger & Mitchell, 2006) “focus group interviews are also described as in depth interviews”. The participants from the 40 individuals who formed a

fishing company constituted people who are called previously disadvantaged people who were placed into focus groups of ten interviewees to take part in any interview. The decision to place them into groups of ten was to avoid creating a big group that may not allow for probing of issues during the interview sessions.

Welman, Kruger & Mitchell, (2006) provides a guideline of not more than 12 and not less than 6 people in a group to take part in a focus group interview. A focus group was selected because it allowed participants to give their responses in a group and also to react to what others are saying in the group. The focus group interview must also be set up according to the guidelines stated by Saunders, Lewis and Thornhill, (2008) that in the group interview the researcher serves as facilitator or moderator of the discussion to ensure that themes that were in line with the research questions were explored. The data to be collected from the participants is as follows:-

- Participants' views on rules of origin.
- How can the government utilise the blue economy for empowerment of the majority?
- Is the government encouraging sustainable fishing in Namibia?
- Strategies the government of Namibia adopts to reduce poverty, inequality and promote entrepreneurship in the fishing sector.
- Transformation of the fishing sector in Namibia to promote economic empowerment of local communities.
- Challenges and prospects for the blue economy growth in Namibia.

The existing framework drawn from the research questions was used as a discursive point. Overall, each interview aimed to cover a broad set of issues consistently with scope for deviation (Ritchie, 2013). This falls under what Rubin and Rubin (1995) call "topical interviews" (p.132). Participants were asked to explain some of the following issues:

- 1) What relationship exists between the Ministry of Fisheries and them the stakeholders?
- 2) What percentage of fish quotas is awarded to the disadvantage people?
- 3) What are the main challenges that they experienced with the Ministry of Fisheries?
- 4) What is done with the proceeds of the fishing quotas?
- 5) What prevents them from being more impactful?

Limiting the bias of interview subjects was important, which is why they were grouped. Interviewing the employees of the Ministry of Fisheries was a priority, although there is a

potential for these respondents to reveal only one part of the story. From the interview, questionnaires' information was obtained on age, rules of origin and citizen's opinion on what the government has achieved regards the sustainability of the blue economy.

The focus group interview may also pose challenges, such as what happens in a situation where some people try to dominate the discussions, and also the challenge of establishing rapport with the participants (Saunders, Lewis and Thornhill, 2008). The researcher ensured that all the participants were given an opportunity to express their views and to take part in the interview.

The interview session was recorded in order to avoid missing vital information during the interview. Some notes were also recorded to allow for probing and further exploration of issues. The interviews which were conducted with the management from the Ministry of Fisheries were for the purpose of triangulation. The individual interviews were audio recorded. This means that the researcher compared data sources in order to see if the themes that were raised in the focus group interview would also emerge in individual interviews (MacMillan and Schumacher, 2006). The researcher also checked documents published by the ministry of Fisheries and Marine Resources, Newspaper publications, the Ministry of Fisheries and Marine Resources website and journal articles as part of triangulation.

3.5. Data Analysis Methods

Ethical consideration was also taken into account when analysing the data. The identity of the participant was coded at the request of participants in victimisation. The researcher carried out a pilot study by conducting some interviews with employees of the Ministry of Fisheries and Marine Resources. Respondents that were involved in the pilot study did not take part in the actual data collection.

Case study based qualitative research is characterised by the overlapping of data collection and analysis (Eisenhardt, 2010). Analysis and theme building is thus an iterative process that occurs throughout fieldwork, which means that discussion guides and questions are liable to change. As noted, continual note taking and analysis which occurred during and just after interviews was one way the researcher ensured that this iterative process took place.

The data analysis process after fieldwork entailed the word-for-word transcription of interviews. As noted, constructs and patterns were tested within each individual case (within case validity), as well as in relation to existing literature. Findings (both quotes and topics) from these steps has been summarised in tables (appendix 3), following Martin and Eisenhart's, (2010) general approach. These tables were then further condensed into themes and findings that appear in section 4 below. The combination of these approaches has ensured greater internal validity of the study's findings (Yin, 2003).

3.6. Research Reliability and Validity

Validity in qualitative research is defined as the extent to which the data and data analysis are believable and trustworthy. Validity is analogous to internal credibility, that is, how research findings match reality. However, according to the philosophy underlying qualitative research, reality is relative to meaning that people construct within social contexts. Qualitative research is valid to the researcher and not necessarily to others, due to the possibility of multiple realities. It is upon the reader to judge the extent of its validity based on his/her on understanding of the study. Most rationalists would propose that there is not a single reality to be discovered, but that each individual constructs a personal reality (Smith, 2005). Thus, from an interpretive perspective, understanding is co-created and there is no objective truth or reality to which the results of a study can be compared. Therefore, the inclusion of member checking into the findings, that is, gaining feedback on the data, interpretations and conclusions from the participants themselves, is one method of increasing validity.

Although it has its own disadvantages, Armstrong (2004) consider member checking into the findings as “the most critical technique for establishing validity”. Thus, face validity was conducted to confirm whether the concept of commitment to independence measures what it is intended to measure. This study has obtained experts' judgment as to whether the measure of commitment to independence taps a particular construct with sufficient breadth and depth.

Reliability is analogous to dependability, that is, the consistency of observing the same finding under similar circumstances. According to Creswell (2009), it refers to the extent to which research findings can be replicated with similar subjects in a similar context. It emphasizes the importance of the researcher accounting for or describing the changing contexts and circumstances that are fundamental to consistency of the research outcome.

Reliability is problematic, and is practically impossible, as human behavior is not static, is highly contextual and changes continuously, depending on various influencing factors.

3.7. Limitations

There are limitations related to the research approach used in this work. The research utilised a qualitative research approach to gather data. The participants were interviewed on the basis of purposive sampling. A research approach that uses a random sample can gather data that is generalizable to the whole population. If a random sample is used, there is always a risk of bias in the data that is gathered. In order to reduce the bias that is related to the research strategy, data was collected from the population until a saturation point was reached and no new data or opinions could be collected from the population. Efforts were made to ensure that the participants from whom data was collected were knowledgeable about the issue being studied. The goal of qualitative research was not to generate data that can be generalised to the universal population.

4. RESEARCH FINDINGS, ANALYSIS AND DISCUSSION

4.1. Introduction

The chapter has focused on the presentation, analysis and discussion regarding an assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay. The findings are in relation to the questionnaire that directed the study and was designed for 50 employees from the Ministry of Fisheries and Marine Resources and 40 local individuals and previously disadvantaged fishing quota holders in Swakopmund and Walvis Bay. The main findings of this paper were deducted from the research questions formulated to answer the enquiries of this study. The findings are presented according to the four focus group interviews that took place during the research and individuals who are involved in the management of Fisheries and Marine Resources. The total number of the participants was 90.

4.2. Sustainability of fish resources

The fishery sector occupies an exclusive and vital place in the Namibian economy, especially as a result of the renewable nature of the resource. Fisheries' sustainable exploitation will determine the future of the industry, and all the national associations joined in advocating for consistent resource management policies. Respondents were asked about their views regarding the total allowable catch (TAC) policy, environmental and sustainability policies, international controls, and the role of the government. Seventy-five (75%) percent of the respondents noted the importance of sustainable exploitation of the marine resources, stating that the government is doing a good job in managing fisheries.

However, 25% of the respondents were worried about the internationally determined national allocation quota determined by ICCAT. Namibia is a member of the ICCAT group that manages the exploitation of tuna resources. The group allocates quotas, and any unmet quotas are shaved off and allocated to other countries. The NTHLA stated that the Namibian quota has declined and may be further reduced if the country continues to fail to meet the quota. From the respondents' perspective, Namibia is running out of time to prove itself and remain relevant and viable in the tuna harvesting market.

Rules of origin

Table 2: Rules of origin

Rules of origin	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
1. Rules of origin is a problem on preferential trade, and Namibia's export potential	6	22	10	12	50
2. Rules of origin is not a problem on preferential trade, and Namibia's export potential	30	10	6	4	50

The respondents were asked about their views on rules of origin, whether the rules of origin is a problem or not a problem on preferential trade, and Namibia's export potential. Six respondents strongly agree, 22 agree, 10 disagree and 12 strongly disagree that rules of origin is a problem on preferential trade and Namibia's export potential. 30 respondents strongly agree, 10 agree, 6 disagree and 4 strongly disagree that rules of origin is not a problem on preferential trade, and Namibia's export potential.

Respondents said that rules of origin were not a problem, given that they were mainly exporting to South Africa, as this ensures that all required standards are met and that all products are traceable to the vessels from which they come. Traceability was also highlighted as very essential. From interviews that agreed that the rules of origin is a problem on preferential trade, and Namibia's export potential, a number of themes emerge, including a lack of access to finance, difficult operating conditions, stringent quality standards, and a lack of capacity to independently enter new markets. High dependence on one market can be disastrous, as seen during the global financial crisis; Spain's significant financial troubles hit the Namibian fishing sector hard, since Namibia's European exports mainly enter through Spain. The associations did not, however, observe any lack of export markets.

4.3. How can the Government utilise the blue economy for the majority empowerment?

The research findings for each focus group are presented in a table form. The focus groups are presented as focus group A, B, C and D. Finally the individual interviews were presented in a separate interview.

Table 3: Responses from (focus group discussion) FGD 1

Finding	Details	Representative quote
Namibianisation of the fishing sector is very important	The process requires that previously disadvantaged people to be involved in fishing and must benefit the communities in Namibia.	<i>It is important to ensure that previously disadvantaged people are also involved in the exploitation of our marine resources. Respondent 1 focus group 1</i>
Joint Ventures with foreign companies	A strategy to empower locals and to mentor them for business. Regulations and technology expenses are the major constraints to operating in the blue economy in Namibia. Joint ventures may provide one way out of this dilemma.	<i>Focus group 1 Respondent 10 Foreign companies are afraid of government intervention in business</i>
Impact of fishing on local communities	Ways in which communities are supposed to benefit. Much needed job creation for the previously marginalised and improved livelihoods for the society.	<i>Communities intervention may take the form of giving aid to address developmental issue or just temporary help such as distributing food and there are no guidelines to make the community investment more meaningful Respondent 9 focus group 1</i>
The empowerment	The process that previously	<i>The level of legal requirement of</i>

Finding	Details	Representative quote
strategy in helping empower ordinary Namibian people.	disadvantaged people have to follow is too technical and difficult. There may be a need to translate material into vernacular for better comprehension by the intended beneficiaries	<i>fishing quotas remains stringent for ordinary people who may be limited by limited education and lack of technical knowledge to complete the papers. Respondent 3 focus group 1</i>
Measures to rectify the Namibianisation policy	Important to simplify the process of applying for tender regarding fishing quotas and identifying the entrepreneurs from previously disadvantaged people and support them	<i>Not everyone has what it takes to be an entrepreneur. The empowerment policy must be able to support people interested in fisheries business Respondent 2 focus group 1</i>
Sustainability of fishing of fisheries	Sustainability is placed in the hands of fishing companies. Lasting sustainability should be an all stakeholder prerogative. Disjointed policy implementation will not work; - rather, inclusive growth with shared benefits will be the best.	<i>The fishing companies are expected to comply with the legislation to ensure sustainability Respondent 7 focus group 1</i>
Obligation of Namibia regard sustainability of fisheries	The Ministry of Fisheries must maintain the research and monitoring of fisheries resources	The management of fisheries cannot be left in the hands of private firms <i>Respondent 8 focus group 1</i>
The impact of fishing quotas on the Namibianisation policy	Has led to the rise of a few rich people and allegations of irregularities in the issuing of tenders for fishing quotas. There is therefore a need to include	<i>The impact of Namibianisation has led to the empowerment of a few people who are well connected to the establishment Respondent 8 focus group 1</i>

Finding	Details	Representative quote
	that majority that were marginalised through targeted blue economy programmes. The green fees that are obtained from the blue economy in the short term should be ploughed back into continued skills development.	

Source: Author's Compilation

The focus group 1 reflects that the sentiments of the focus group that they are pro indigenisation of the fishing sector in Namibia to incorporate the people who were previously disadvantaged by the discriminatory policies of the past. The new policies should be crafted and implemented in collaboration with all interested stakeholders to develop unity of purpose and to bring about different experiences that will help to shape the success of the process. The focus group concurred that the participation of the indigenous people in the blue economy is paramount. However, the participants observed that the legal framework designed to facilitate the empowerment of the local people is still too stringent, that it is not facilitating entry but has also become a barrier to entry by previously disadvantaged people.

The entry requirements according to the Ministry of Fisheries and Marine Resources (2007) are: Involvement of local people who were previously disadvantaged through joint ventures with foreign capital, consideration of whether or not the applicant is a Namibian citizen, the ownership of a vessel that can be used by the applicant and the advancement of people that were socially disadvantaged by previous policies. On the point of the ownership of vessels, it is highly unlikely that ordinary people who may want to venture into fishing will own a fishing vessel. The legal framework does not specify how the local venture can be formed with the local people. It is not clear how the law will help the Namibians to become actively involved in fishing or in forming partnership with foreign capital. Legal experts therefore need to help inform how the framework can be better specified on how the local ventures are to be formed.

The participants were asked to indicate the corrective measures that may need to be taken into account in order to actualise the government policy of empowering people in marine resources. A number of suggestions were proposed such as: training people in business and financial support that require local people to acquire fishing vessels. This has reflected what the literature has suggested on utilising the blue economy for sustainable development (Ababouch, 2015) and (UNECA, 2014) the issues of educating the locals and infrastructure development. One of the 8 respondents, in focus group 1 stated that *“local people lack collateral that can allow them to borrow money from banks in order to acquire infrastructure that is needed to engage in a fishing venture”*. The participants also indicated that the majority of the people that the law intends to empower are just not acquainted with business practices. It is therefore imperative that people who are interested in taking part in fishing ventures undergo training that can help them to obtain the training, mentoring or coaching that they need.

The focus group 1 also indicated that sustainability of the marine resources is important for the country, and that it cannot be left in the hands of a few private firms. The respondents felt that the government has to continue monitoring the fishing activities of private companies. The fishing companies from outside Namibia are reluctant to engage in partnership with locals, due to a number of reasons, such as indicated by Focus group 1 Respondent 10. This is in line with what the literature has suggested on integrated coastal zone management (Dakora and Bytheway, 2014) to enable a sustainable blue economy.

Foreign companies are afraid of government intervention in business

The respondents in focus group one agreed on the notion that there is always fear on the part of foreign capital that they may lose their money due to unplanned indigenisation programmes that do not respect private property. The participants were also asked for comment regarding the impact private companies had on local communities, and one respondent opined that: community intervention may take the form of giving aid to address developmental issues or just temporary help such as distributing food, and there are no guidelines to make the community investment more meaningful (Respondent 9 focus group 1). This exactly reflected what literature has suggested on ways to promote effective utilisation of the resources of the

blue economy, thus an understanding of nationally defined priorities, social context and resource base (Benkenstein, 2015).

4.4. Is the Government encouraging sustainable fishing in the Namibian ocean?

The above mentioned question was posed to focus group 2 and the responses are as follows:

Table 4: Responses from focus group 2

Namibianisation of the fishing sector is very important	It’s important to ensure that previously disadvantaged groups such as males from previously disadvantaged groups and people with a disability may benefit from the fishing quotas	<i>The government intentions are noble but they need clear details on how the categories that area identified as disadvantaged will benefit from the programme of fishing quotas Respondent 8 focus group 2</i>
Joint Ventures with foreign companies	A strategy to empower locals and to mentor them for business. Regulations and technology expenses are the major constraints to operating in the blue economy in Namibia. Joint ventures may provide one way out of this dilemma.	<i>The quality of local partners at times discourages foreign companies in getting into joint ventures. The local people lack business knowledge and capital to enter into partnership Respondent 10 focus group 2</i>
Impact of fishing activities on communities	Ways in which communities are supposed to benefit. Much needed job creation for the previously marginalised.	<i>There are no set guidelines and companies do what is convenient for them Respondent 9 focus group 2</i>
The empowerment strategy is helping empower ordinary Namibian people.	The empowerment is elitist in nature due to the complex process. There may be a need	<i>The empowerment only benefits a few people due to the complex technical process which</i>

	to translate material into vernacular for better comprehension by the intended beneficiaries. State lawyers can also help locals with interpretation of legal documents.	<i>requires education to understand and also resources to pay a consultant and a lawyer to help process them Respondent 10 focus group 2</i>
Measures to rectify the Namibianisation policy	Educate people on business and entrepreneurship	<i>The ordinary people require education starting from school on the importance of entrepreneurship. Ordinary people must begin to look for opportunities to become engaged in the economic activities of this country instead of just thinking of securing jobs. Respondent 10 focus group 2</i>
Sustainability of fishing of fisheries	The fishing environment promotes sustainability due to the allocation of quotas and research and monitoring done by the Ministry of Fisheries. Lasting sustainability should be an all stakeholder prerogative. Disjointed policy implementation will not work.	<i>The Ministry of Environment and Tourism maintains a research directorate for monitoring fish stocks and also for research, It helps to ensure sustainability Respondent 2 group 2</i>
Obligation of Namibia regard sustainability of fisheries	Namibia is obliged by international obligations and also by its food security requirement to ensure	<i>Namibia has to ensure sustainability due to its international duties to Food Agricultural Organisation and</i>

	sustainability	<i>also to its national commitment to fisheries</i> <i>Respondent 4 Group 2</i>
The impact of fishing quotas on the Namibianisation policy	Fishing quotas have not had a major impact. There is therefore a need to include that majority that were marginalised through targeted blue economy programmes. The green fees that are obtained from the blue economy in the short term should be ploughed back into continued skills development.	<i>The impact has been minimal due to the technological requirements of fishing and the resources required to enter the sector</i> <i>Respondent 3 group 2</i>

Source: Author's compilation

The second focus group interview showed that focus group 2 concurs that empowerment of groups such as males from previously disadvantaged groups, empowerment of women and empowerment of people living with a disability is the right trajectory to take for Namibia. However the policy is silent on how these individuals may benefit and this has created challenges in implementation of policy. Respondent number 4 in focus group 2 asserted that “there must be financial support for people who want to venture in the fishing business. The support must involve training as well as the provision of infrastructure and government should also increase its allocation of the budget to these needs of the communities surrounding the ocean”. In short, this revealed that the Namibian government allocates some funds to promote a sustainable blue economy (Respondent number 4 in focus group 2).

The focus group asserted that before economic empowerment can be realised there must be the building of the capacity of the people to own and run business. The focus group insisted on the importance of business training, which can lead to business ventures such as joint ventures before there can be complete ownership of marine resources with local people.

4.5. Strategies the Government of Namibia adopts to reduce poverty, inequality and to promote entrepreneurship in the fishing sector

Focus group number 3 was accessed to explore the various strategies being adopted by the Namibian government to reduce poverty, inequality and to promote entrepreneurship in the fishing sector and the results are as follows:

Table 2: Responses from FGD 3

Finding	Details	Representative quote
Namibianisation of the fishing sector is very important	Namibianisation is a noble policy but it requires clarity in terms of implementation	<i>Many of the people that are categorised disadvantaged such as women and living with a disability may not have the training and infrastructure to undertake a fishing venture Respondent 1 focus group 3</i>
Joint ventures with foreign companies	A strategy to empower locals and to mentor them for business	<i>Foreign companies are afraid of the emphasis on Namibianisation and are reluctant to invest in fishing in joint venture Respondent 6 focus group 3</i>
Impact of fishing on communities	Ways in which communities are supposed to benefit	<i>Some companies just distribute fish to disadvantaged people in communities and secure tender on that basis Respondent 7Focus group 3</i>
The empowerment strategy in helping empower ordinary Namibian people.	The strategy lacks practical details when it comes to implementation	<i>At times people can bid for fishing quotas using details of people who are not even members of the company but who are identified as disadvantage just to secure the fishing quotas. Respondents 5 focus group 3</i>
Measures to	Review of the policy is	<i>Review of the policy is required to include</i>

Finding	Details	Representative quote
rectify the Namibianisation policy	required to include targets of Namibians who have to benefit and simplified requirements	<i>targets of Namibians who have to benefit and simplified requirements. Respondents 5 focus group 3</i>
Sustainability of fishing of fisheries	Fishing quotas ensure sustainability	<i>The Directorate of Fisheries allocates fishing quotas based on fish stocks that are available and they also use data submitted by the bidding company on certain fish stock. Respondents 6 focus group 3</i>
Obligation of Namibia regard sustainability of fisheries	It's important to ensure sustainability	<i>The fishery resources generate a lot of revenue for the country and it would not be wise on our part especially through the Ministry of Fisheries to allow depletion of fish stocks Respondents 2 group 3</i>
The impact of fishing quotas on the Namibianisation policy	Fishing quotas have a limited impact	<i>Some private fishing firms also secure fishing quotas on the promise of community benefits that they will offer if they secure the bid. It is not just a strategy to raise entrepreneurs. Respondents 10 group 3</i>

Source: Author's compilation

The focus group three indicated that the category of previously disadvantaged people includes males who are from the groups that were excluded from taking part in the economy, the women and people who live with a disability. One respondent 10 in focus group 3 asserted that

“There are many people living with a disability of one form or another in the country and these people have limited access to school due to societal attitudes and they continue to be

marginalised so there is a greater need for government intervention with various rewards from ocean products to promote equity with the nation”.

It is for this reason that people who are living with a disability are now being represented in many fishing quotas that are issued. One respondent 5 declared that *“at times people indicate names of women or people living with a disability to be part of the group for the sake of obtaining the tender although those individuals may not even know what is going on”.*

The focus group has agreed on the importance of ensuring sustainability in the fishing sector. The focus group declared that sustainability has to be ensured by all stakeholders. The focus group noted that very few Namibians have benefited from the Namibianisation policy in terms of fishery resources due to technical requirements that are *“numerous and complicated”* (Respondent 3 focus group 3).

The focus group indicated that the trajectory of the Namibianisation policy was not just to raise entrepreneurs who could take part in the economy but also a strategy by the government to improve the quality of life in the communities. This connotes that companies that promise *“to provide clean water facilities in a community, provide scholarship to children from communities that were previously disadvantaged and also to provide infrastructures such as schools, roads or clinics may be considered for fishing quotas”* respondent 1 focus group 3.

The focus group argued that the Namibian policy framework regarding the allocation of fishing quotas is seeking to do much and as a result it is doing very little in terms of economically empowering people.

4.6. The transformation of the fishing sector in Namibia to promote economic empowerment of local communities

The researcher accessed the focus group 4 to assess on the notion, the transformation of the fishing sector in Namibia to promote economic empowerment of local communities. The key findings in this regard are summarised below:

Table 6: Response from FGD 4

Finding	Details	Representative quote
Namibianisation of the fishing sector is very important	Empowerment of local people	<i>Empowerment will take more than issuing fishing quotas to mentoring, coaching and financial support respondent 7 focus group 4</i>
Joint ventures with foreign companies	A strategy to empower locals and to mentor them for business	<i>At times foreign companies resent that the law acknowledges Namibia as owners of fishing rights without being flexible. It makes them too confident even they do have capital or knowledge of the business Respondent 3 focus group 4</i>
Impact of fishing on local communities	Ways in which communities are supposed to benefit	<i>Some companies fund students from certain communities at university level and secure fishing quotas on that basis Respondent 8 focus group 4</i>
The empowerment strategy and helping empower Namibians ordinary people.	Only a few well-resourced people benefit	<i>The paperwork is rigorous and requires financial resources and help from lawyers to complete the paperwork and to put together the requirements respondent 5 focus group 4</i>
Measures to rectify the Namibianisation policy	Reform is needed in the legislative framework to ensure that more indigenous people benefit from marine resources	<i>The current process to Namibianise the fishing sector is driven by foreign capital rather than the government if you look at the requirements that are in place. Respondents 1 focus group 4</i>
Sustainability of fishing of fisheries	Very important for continued fishing	<i>Sustainability must be the responsibility of both the private sector and the government. Respondent 2 focus group 4</i>
Obligation of	There are international	<i>The government is bound by regional and</i>

Finding	Details	Representative quote
Namibia regard sustainability of fisheries	obligations to take into account	<i>international agreements to ensure that fishing is sustainable. Respondents 6 focus group 4</i>
The impact of fishing quotas on the Namibianisation policy	Fishing quotas had a minimum effect on empowering many people and communities	<i>The fishing quotas had a very limited effect in transforming communities in a significant way. Respondent 3 focus group4</i>

Source: Author's compilation

The focus group 4 opined that empowerment of people that were previously disadvantaged is very critical, however, it will take more than allocation of fishing quotas to training, coaching and mentoring of people in business. If there is no training then, it will be challenging for people to engage in business, since the people will not be equipped to engage in business activities. One respondent 6 focus group 4 indicated that “only a few well educated people with business acumen and at times political connections are able to qualify for fishing quotas”. The ordinary people are not even aware of what is happening and even if they know that there are fishing quotas the process makes them give up before even trying due to its stringent nature.

According to Respondent 1 focus group 4 “The current process to Namibianise the fishing sector is driven by foreign capital rather than the government if you look at the requirements”. This means that there is no capital allocated to the promise of Namibianisation of the fishing sector in Namibia. The government Namibianisation programme depends on foreign investors coming to Namibia and entering into joint ventures with locals, but does not really take a proactive part of raising entrepreneurs through government orchestrated programmes. This means that as far as the Namibianisation of the fishing sector is concerned the government is relying to a greater extent on foreign investors and it is therefore an investor driven programme that may not succeed due to the fact that investors may not see the conditions as favourable for business.

The respondents were asked to indicate ways in which the communities may benefit from the joint ventures or projects initiated by foreign companies and it emerged that:

There are no set guidelines and companies do what is convenient for them

Respondent 9 focus group 2

The lack of guidelines shows that some companies may decide to engage in projects that help communities and some may not. The lack of a framework is detrimental to the development efforts of communities who may benefit from the Namibian blue economy in the form of fishing.

The findings from individual interviews which were undertaken by employees from the Ministry of Fisheries and Marine Resources follow. According to Respondent 1 the Ministry of Marine Resources seeks to ensure that different categories of people are empowered through the fishing programme. The categories include people living with a disability, males from the previous disadvantaged groups and women.

Respondent 1 in individual interviews asserted that the “*Namibianisation policy is seeking to balance the need to attract investment in the fisheries and to ensure that local people and communities benefit from the blue economy resources in Namibia*”. It is this challenge to balance the need for investment in the fishing sector and the need to empower people that has created challenges that seem contradictory. The challenges appear contradictory, in the sense that the government seems to expect foreign investors to fund the Namibianisation project, yet the government itself lacks any programmes that can help to empower the previously disadvantaged people. The whole Namibianisation of the fishing sector depends on foreign investors forming partnership or ventures with locals, or investing in social improvement of communities in Namibia.

It emerged in the interview that technology will also impose barriers on the entry of previously disadvantaged people in the fishing sector as entrepreneurs. The vessels that are being used to capture fish nowadays use computer aided design methods which has made the whole fishing experience more difficult, and increased the economics of the fishing experience.

Respondent 10 individual interviews asserted that “Some individuals have benefited directly by securing fishing quotas, while others have benefited from programmes that are designed to

benefit communities by foreign fishing companies''. This is due to the complicated nature of the bidding process. Ordinary people can complete the bidding forms unaided.

One of the points that enable an applicant to gain points is that an individual must have conducted preliminary investigations into the type of fish that they want to capture in order to know the quantity of the type of fish that one would want to trade in. The requirement for the fishing company to demonstrate its capacity to undertake research and also to prove its ability to fish assumes the availability of huge capital. Unfortunately, most people from communities that are considered previously disadvantaged communities do not have the capacity or the financial resources required to meet the Namibianisation framework.

The individual interviews underscored the importance of ensuring sustainability in the fishing sector by the government working together with the private companies.

4.7. Challenges and Prospects for the Blue Economy Growth in Namibia

The respondents were asked about the challenges and prospects for the Blue Economy in Namibia. The researcher obtained the following responses.

Table 3: Challenges and Prospects for the Blue Economy in Namibia

Challenges and Prospects for the Blue Economy in Namibia	Frequency	Percentage
Indigenization and a binding capital constraint	13	26%
The value addition policy drive	11	22%
Skills shortage and problems with boatmen's qualifications	7	14%
The challenging business environment	9	18%
Changing mindsets and dealing with water scarcity	3	6%
Competition for coastal land and industrial (mis)classification	3	6%
Access to data	4	8%
None of the above	0	0%
Total	50	100%

Twenty-six percent (26%) of the respondents believed that the ‘Namibianisation’ of the fishing sector, a form of affirmative action that favours Namibian-owned firms, has resulted in people and consortiums winning fishing quotas without being able to fully exploit the resources. Some quota holders lack the necessary capital and have no access to credit (financial institutions are often hesitant to lend because producers lack collateral; annual quotas cannot be used as collateral). The allocation of quotas to people without a capital base has created a secondary market for fishing licenses in which license holders sell them to people or firms with the necessary fishing capacity. The existence of right holders with no direct involvement in fishing unnecessarily extends the value chain, which increases costs and cuts down profitability. It therefore takes longer for those directly involved in fishing to accumulate resources to invest in capacity expansion. The general view of the fishing associations seems to be that there is a need to cut out the unproductive middlemen, who only represent a cost to the sector.

The problem of lack of capital is particularly acute for operators in trawling and deep-sea fishing. These operators often cannot buy their own vessels and have to rely on hired South African vessels. Furthermore, at the time of the interviews with the associations (in 2014), of the seven locally owned vessels, only two were reported to be sea-worthy. Given these challenges, it may be necessary for the government and financial sector to collaborate to build local capacity through the acquisition of vessels. Funding strategies have to be developed that will not put the burden on taxpayers (e.g. through the development of concessionary loan facilities or the introduction of venture capital).

Twenty-two percent (22%) of the respondents indicated that over the past few years, the Namibian Government has been pushing for greater value addition to fish resources. This drive has been met with varying levels of acceptance and success. Some companies have invested in new processing capacity and have developed new products. Some of this investment went to upgrading processing equipment and acquiring new vessels. Other firms have increased the utilisation of existing capacity by importing frozen fish for processing during the off-season, thus reducing the down-time for both capital and labour. This is a new avenue that companies can explore as a way of increasing supply.

The growth of processing capacity has brought about another potential problem, however, in that it has allowed companies to lobby the government to increase total allowable catches.

This may have negative impacts on recruitment rates and therefore the long-term sustainability of fish stocks.

Fourteen percent (14%) of the respondents pointed out that the Namibian economy has abundant unskilled and semi-skilled labour; however, it faces a general shortage of skilled labour. Fishing companies often complain that they are not able to recruit engineers, electricians, diesel mechanics, and vessel skippers locally and are instead forced to recruit from abroad, which raises the challenge of rigid immigration controls. The government can thus insist on having a period in which these Namibians can be understudies of these foreigners. Over time this problem of skills mismatch in the blue economy can be contained and the previously disadvantaged groups will be truly empowered. Namibia can also request support from the commonwealth secretariat in terms of skills training of the previously disadvantaged in the blue economy sectors.

Although NAMFI is tasked with the training of sea-going personnel, some firms complain about the quality of such staff. In addition, firms are annoyed by the lack of qualification comparability between locally trained personnel and requirements in South Africa and Angola. Boatmen's qualifications given by NAMFI are rejected as insufficient for the needs of international shipping, meaning that companies cannot use their boats to seek work in neighbouring South Africa and Angola. It also means that boatmen trained in Namibia cannot secure employment in other countries during the Namibian off-season. Both companies and workers are unhappy with this situation and believe that harmonising domestic qualifications with international standards will be beneficial to everyone in the long run.

Another problem acutely affecting the lower ranks of the workforce in the fishing sector is low wages. Due to the combination of seasonal labour and low wages, making ends meet can be a very serious challenge for fishery workers, many of whom cannot afford to purchase the products that they produce.

Eighteen percent (18%) of the respondents pointed out that fishing companies, like the rest of the Namibian economy, face a challenging operating environment. There is concern that the shortage of electricity in the region will have negative impacts on fishing companies, especially those investing in inland processing. The high cost of fuel (both diesel and electricity) adversely affects profitability, and many small companies struggle to remain viable. It is therefore not surprising that there has been consolidation in the fishery sector, and

that the sector is characterized by relatively large companies. If these infrastructural hurdles can be overcome, especially through dedicated budget allocations and reinvestments of green fees, great wealth can be generated from the blue economy in the long run.

The variability of Namibia's exchange rate, especially over the past six years, has impacted firms' investment capacity. While firms benefit, in terms of local currency, from exchange rate depreciation, the same depreciation increases the cost of imported capital. Firms also have to contend with numerous levies and taxes. They argue that since they have to retrain employees with qualifications from local institutions including NAMFI, there is no justification for them to continue being taxed to fund the latter. Both exchange rate volatility and taxes may result in delayed investment decisions. These challenges bring about new business practices such as equipment and capacity hiring over own investment.

Six percent (6%) of the respondents pointed out that in the aquaculture sub-sector, the main challenges faced by operators are water scarcity, the high level of capital intensity, and competition from other farming activities. In the areas where fresh water fish has been consumed for centuries, that fish has always been harvested from rivers. Changing people's mindsets toward growing fish and harvesting them from ponds takes time. This principle also applies to developing the expertise to conduct aquaculture. The government has developed regulations to govern the harvesting of fish from rivers and lakes so as to preserve resources and prevent the introduction of invasive species. In an interview with a tilapia farmer from the Erongo region, it emerged that tilapia is being imported from Vietnam, and that there does not seem to be adequate control of imports at Walvis Bay. As with the processing of marine-based fish, the farmer complained that local producers are being undercut on price by the Vietnamese imports. It was also alleged that the production systems used in the exporting country do not meet the strict standards set out by the Namibian Government.

Six percent (6%) of the respondents pointed out that mari-culture operators face significant challenges accessing lucrative markets such as the EU. The latter has very high health and safety standards that Namibian producers cannot readily meet. Namibian producers have been exporting to Asia instead, but that market is increasingly applying the same EU standards. Developing the ability to achieve these standards will likely be difficult, and operators may need government support through the introduction and implementation of graduated standards, and through negotiations with the EU to establish grace periods.

Eight percent (8%) of the respondents have indicated that the effective management of the fishery sector requires evidence-based policies. One of the big challenges facing policymakers is a lack of accessible data. In the process of conducting this research, many hurdles were encountered in accessing existing data because of the lack of a unified database, as well as sometimes cumbersome access procedures. Sometimes published data on the sector are incomplete (e.g. employment and production figures in aquaculture and mari-culture) or do not exist (e.g. allocation of fishing quotas by ethnicity and gender). Given that research on the fishery sector can contribute positively to the sector's development, failure to access existing data stifles research and hence evidence-based policy discussion and formulation. It is important that the responsible Ministries put in place mechanisms to collect and update statistical data, especially disaggregated data.

4.8. Summary of Findings

Considering the primary data gathered from the interviews certain points are clear:

- There is a consensus that Namibianisation is the right policy trajectory for the country;
- The policy requirements for Namibianisation are too stringent to accommodate local entrepreneurs who do not have experience in fishing and the resources required;
- The Namibianisation policy is not funded by the government and lacks detailed plans for implementation;
- The government of Namibia is depending on foreign investors to implement the Namibianisation policy;
- Only individuals that are educated and who have knowledge of business are currently benefiting from the process;
- The technological requirement for fishing has introduced another barrier to entry for fishing;
- There is a lack of training and financial support for the entrepreneurs who become involved in fishing and;
- There are also sentiments that the individuals who are well connected politically secure the tender for fishing quotas.

The policy of empowerment: Namibianisation of the fishing sector so that Namibians benefit from the blue economy has major weaknesses that require major revisions to take into account the categories that are identified as previously disadvantaged.

4.9. Conclusion

This chapter presented data gathered from respondents and the analysis that followed. It outlined how the government can utilise the blue economy for the majority empowerment, how the government can encourage sustainable fishing in the Namibian ocean, strategies the government of Namibia adopts to reduce poverty, inequality and to promote entrepreneurship in the fishing sector and how the fishing sector in Namibia can be transformed to promote economic empowerment of local communities. Chapter 5 presents the summary, conclusions and recommendations for the study.

5. RESEARCH FINDINGS, ANALYSIS AND DISCUSSION

This chapter summarises the major findings and recommendations from the study. The chapter then provides personal reflections on the process and highlights some of the challenges and limitations encountered in the study. Finally the chapter provides a pathway for future studies.

5.1. Discussion of Findings

The focus groups interviews and all the individual interviews showed that there are challenges with the implementation of the Namibianisation policy. This implies that no quick fix implementation of the policy will work. Rather, there is need for widespread consultation and for a multi-sector approach to achieve sustainability and inclusive blue growth. There is a need for continued research about blue economy activities and partnering with others who are already enjoying success in the area, to gain from technology and information transfer. Even though Namibia has a research department, there is a need to make sure that the department is adequately resourced and its activities are protected from political interference.

The interviewees showed a consensus on the desirability of a policy that would help previously disadvantaged Namibians to gain control of the economy. The interviewees also concurred on the importance of applying the policy to categories such as men who were disadvantaged, women and also people living with a disability. An interviewee pointed out that a complete “Namibianisation policy must take into account all categories that were previously disadvantaged” (Respondent 1 focus group 2). To achieve this there may be a need to adapt the governing structures to make them more flexible and that dedicated budgets be set aside to ensure that infrastructure needed for the blue economy is in place. There is also a need for proper monitoring, because goals may be right, but if the implementation is poor, the results desired of inclusive growth will be compromised. The monitoring is needed especially to ensure that the previously disadvantaged who get quotas do not sell their quotas to others and thus lose out on the long term benefits.

The ideal blue economy model for Namibia thus entails close monitoring to ensure that beneficiaries do not sell their fishing quotas to get short term income at the expense of longer term and more sustainable gains. There is a need for collaboration to build on the strengths of

all stakeholders involved, especially when it comes to environmental sustainability of the ventures. There is need for training for the previously disadvantaged in whose hands the success of the whole programme lies.

5.2. The research gap

The researcher has explored various critics by different scholars under this research pertaining to the study of blue economy in relation to sustainability development in Namibia. Literature is drawn from many other countries to demonstrate ways in which individuals or communities that were previously disadvantaged can become empowered with the utilisation of the blue economy. In this section the findings are related to other studies in order to draw lessons from them. The purpose of this section is to demonstrate ways in which Namibianisation can be effected effectively by drawing lessons from the findings.

Table 8: Literature and evidence from primary data

Common characteristics identified in literature from other countries	Evidence from primary Data
Community shareholding schemes Matsa and Masimbiti (2014)	Lack of resources and skills among previously disadvantaged people
Joint ventures Liu, Ashton, Acquaye (2014)	Previously disadvantaged people lack resources and finance to take part in fishing
Human Capital Development theme Jones and Chiripanhura (2010) Hamushek, and Woessmann, (2009).	The focus groups demonstrated that all the previously disadvantaged people lack skills, resources and infrastructure to do commercial fishing
Development of entrepreneurs Schumpeter (1934)	People lack the skills of entrepreneurship

Evidence from secondary and primary data on the challenge of empowering communities and individuals who were previously disadvantaged can prove to be daunting. In the data obtained from the focus group interviews and individual interviews, it showed that the Namibianisation approach can take the form of joint ventures or provision of evidence on the part of commercial companies, in which they demonstrate how Namibians will benefit from the

investment by the private firm in terms of its fishing operations. There are empowerment programmes that have been implemented in other countries that were intended to benefit communities.

The current Marine Resources and Fisheries (Act No 27, 2000) does not stipulate the amount of shares the foreign investors may plough into the communities in Namibia in order to secure fishing quotas. The primary data shows that the Namibia framework for economic empowerment is not comprehensive enough to cater for the need of many people in the country.

The primary data also shows that many local people do not have the knowledge and resources for the business and that fishing in Namibian waters is also requiring technological resources which people who were previously disadvantaged do not have. The stipulations listed in the legislative framework seem to give the possibility of joint ventures as one of the only viable options to empowering previously disadvantaged people to take part in commercial exploitation of fishing resources. Stewart and Maughn (2011) acknowledge that there is no single definition of a joint venture and that an international joint venture is seen as “the joining forces of two or more business partners from separate authorities to exchange resources, share risks and share rewards from a combined initiative. In the majority of cases one of the partners is located in the area of jurisdiction of the joint venture.

Evidence from secondary literature shows that there are challenges with joint ventures that may be formed in the fishing sector, although they present an opportunity to do business in a country where the government is not in favour of the majority of shares being owned by foreigners. The government of Namibia encourages joint ventures in order to encourage Namibianisation of the fishing sector in the country, although literature shows that more than 50% of all joint ventures fail (Stewart, and Maughn, 2011). The intention of the Namibian government in encouraging joint venture is to ensure that Namibians secure access to the infrastructure required for fishing, and also to gain knowledge and technical experience required to do business.

Literature reflects that joint ventures face a number of challenges, such as lack of permanence and flexibility in management. Joint ventures may fail due to lack of financial support from the financial sector (Igbanugo, 2011). Literature reflects that joint ventures may experience

huge risks such as fluctuation in foreign currency, change of government, blocked funds, and expropriation.

Ahmed, (2013) in a study on joint ventures literature in different countries opined that joint ventures may have the following advantages: obtain information in areas such as marketing, ability to access technology that was readily available and ability of a company to secure external capital. There are also benefits related to managerial and entrepreneurial capabilities and skills; for instance Namibian partners would be able to benefit from the skills of other partners. Ahmed identified the following pitfalls which anyone trying to engage in joint ventures: of trust among partners, different management styles, lack of information and changes in the business. Although there are pitfalls related to joint ventures, there are also huge prospects for joint ventures in Namibia.

The findings of the research also show that Namibians lack business acumen. Literature shows that it is important for a country to develop its human capital in order to experience economic growth in its GDP. The goal to Namibianise the economy cannot work in a situation where the level of human capital is very low.

5.3. Contribution

The research supports the data from literature that economic empowerment of people requires the development of entrepreneurs, the development of a right business environment and the provision of business mentoring and coaching, and the development of human capital. Although the government is emphasising the joint venture in the exploitation of fishery resources, in order to benefit the previously disadvantaged people, there are both challenges and benefits from such an approach.

Joint ventures are necessary to ensure that Namibians acquire skills and resources that they need to actively engage in the economy and not only in the fishing sector but in other sectors where Namibianisation intends to be introduced. The contribution of this work to literature is to demonstrate the pitfalls that the government has to be aware of to ensure that joint ventures may succeed. The government has to create that enabling environment that allows joint ventures to succeed, especially in the context of its tax laws, legislative framework that deals with immigration of foreign labour, repatriation of profits, inflation and government interference in business. If a country has a business environment that does not lock away

money from foreign investors and makes it difficult to repatriate money, then there will be challenges in attracting foreign ventures who may want to enter into partnership with Namibians.

The research also contributes to literature in the sense of revealing that there is no short cut to economic empowering the Namibian people who were previously disadvantaged through the utilisation of the blue economy. The long term strategy that may produce desirable results is an approach that develops human capital in Namibia.

The contribution of this study to literature is also the observation that there is no approach to economic empowerment of the people in Namibia via effective utilisation of the blue economy. One key observation that emerged from this study is that entrepreneurship is also one of the keys to economic growth and poverty reduction in Namibia. Baumol, (1996) and Mair and Marti, (2009) noted that Schumpeter (1934) correctly opined that entrepreneurial activity drives economic growth and job creation. It is therefore important for governments to invest money in entrepreneurial development and in research on start-up businesses. The government of Namibia must continue to invest in research and development on effective ways of developing entrepreneurs in the country. Job creation strategies will help Africa to develop empowered people especially now that it is documented that Africa has more young people than any other continent. The research contributes to literature on economic empowerment by submitting that entrepreneurs can be the catalysts for economic growth and poverty reduction, and a reduction in economic inequality that many countries that emerged from colonialism are experiencing.

Limitations

Efforts were made to ensure that the participants from whom data was collected were knowledgeable about the issue being studied. The goal of qualitative research was not to generate data that can be generalised to the universal population. The use of triangulation was intended to overcome the weakness of a qualitative research strategy by employing rigorous data collection methods. The other limitations for the study were as follows:

Financial Resources

A lack of resources such as money has constrained the study from reaching its fullest potential. The researcher had to use financial resources to travel to Swakopmund and Walvis Bay, making appointments and becoming familiar with the research sites, as well as conducting the interviews, printing out the questionnaires, handing them out to the participants and collecting them. Despite these constraints, the study managed to use the available resource which then made this study a reality.

Participants' Cooperation

In general participants are very busy people and some may not even have the time to complete a questionnaire or spend time on a 5 minute interview. Therefore, participants' cooperation was a major limitation of this study. Some participants lost their questionnaires and had to be given new ones and this has limited the collection of required information.

5.4. Research Conclusions

The study was prompted by the desire to find out how resource constrained countries such as Namibia are using the ocean resources to reduce poverty and inequality and to empower its previously disadvantaged populations with the utilisation of the blue economy. The research also sought to discover how to integrate the achievement of sometimes conflicting objectives of resource efficiency, sustainable business operations, inclusive jobs and improved well-being. The study investigated how the sustainability development of the blue economy can reduce poverty and empower the people, while simultaneously maintaining the ecological balance of the blue economy. There is a great need to make sure that resources are conserved. If any pollution occurs, it should be paid for in green fees. It has been revealed in the study that much is needed to be done for the full capacity utilisation of the blue economy of Namibia and retention of the sustainability of the ocean resources. Even though there are great policies on paper, and many best practices to learn from other countries there is still need for efficient delivery, monitoring and evaluation.

This study highlighted the structure, performance, and challenges of the fishery sector in Namibia. It highlighted that the sector is classified as a star sector that could contribute to the country's employment and economic growth, in line with the national development programmes. The legal and institutional framework governing the blue economy and the

evolution of stocks was also examined, and concerns have been raised about the growth of TACs and the pressure that this will have on stocks.

The problems and challenges facing the blue economy in Namibia include a lack of access to finance, a shortage of skilled labour, a lack of locally owned vessels, the impacts of seismic activities and undersea phosphate mining on fish stocks, and the seeming lack of policy coordination and consistency between the Ministries of Fisheries and Marine Resources, Mines and Energy, Industrialisation Trade and SME Development, and Environment and Tourism. The lack of coordination and agreement between these government ministries may result in fishing companies facing serious operational challenges both at home and abroad.

Lastly, this study calls on the Namibian Government to maintain up-to-date and comprehensive data on fish and fish products and to allow researchers access to such data for analysis. The need for data collection and updating is most acute in the aquaculture sub-sector. Data access and information-sharing will improve transparency and oversight, and will ensure that future policy formulation and implementation on the blue economy in Namibia is evidence-based.

6. RECOMMENDATIONS FOR FUTURE RESEARCH

The study was based on assessing the blue economy of Namibia. The researcher suggests further studies be carried out on the assessment of the blue economy of Namibia and the sustainable development theme, using a quantitative approach to determine and rank the most profitable resources from the ocean besides basing the discussion on fishing activities only. It is therefore recommended that more research be carried out not only in Walvis Bay and Swakopmund but also in all other coastal towns such as, Lüderitz, Henties Bay and others, and compare the results from all towns. This could also be extended to other areas within the wider service sector regarding an assessment of the Blue Economy in Namibia.

There is a need to conduct the same study in five years' time within the same setting to verify whether the results would have change by then, since the operations and ways of working in the general service industry changes every day, due to consumer demand and awareness. The framework for the development of entrepreneurs in Namibia will need to be tested further in Namibia and other countries in the SADC, and also in the developed countries. Further testing can help to enhance or validate the theme on how people can be empowered in a country through human capital theme and institutional theme. In testing the framework, the variables that are presented such as attitude, personality and individual traits have to be tested for the way that they affect the development of entrepreneurs in a country. Further research may also need to test the interaction between individual and conceptual factors in economic empowerment.

Given the prominence of human capital in economic development, future research has to test the impact of the development of human capital on the development of entrepreneurs in a country. This would provide a better appreciation of how human capital development helps in the development of entrepreneurs. The importance of contextual factors in economic empowerment, such as regulatory framework, ability to access financial assistance and social capital has to be tested in future research. Further research would help to clarify ways in which the conceptual factors impact on efforts to empower people.

Namibia faces challenges in the area of poverty, unemployment and economic inequality which can be addressed through future research, and this work can help with recommendations to improve the development and economic growth in an inclusive way.

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APPENDICES

Appendix 1: Questionnaires

EMPLOYEES OF THE MINISTRY OF FISHERIES AND MARINE RESOURCES QUESTIONNAIRE

Dear Participant(s),

My name is Sophia Florence Mouton (Mobile: +26481 223 0870), a postgraduate student at University of Cape Town. I am conducting research for the award of a Master of Commerce in Development Finance Degree. Please kindly assist in answering the research questionnaire for the collection of vital research data. You will answer this questionnaire anonymously and all research ethics will be complied with. Should you decide to exit the research process at any given stage, please feel free to do so.

Research Title: An assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay

Research Supervisor: Dr Mundia Kabinga (PhD)

Research Objectives

- To make an assessment of the Blue Economy in Namibia
- To determine whether the Namibianisation policy work
- To identify the challenges and prospects for the Blue Economy in Namibia

- To recommend how the blue economy in Namibia can be transformed to promote economic empowerment of local communities

Expected completion Time: 10 - 15 minutes

Fill in the blank spaces and tick the appropriate check boxes.

Part A: General information

Please indicate by a tick () to show your answer to the stated questions.

1. What is employment profile/position?

Item	Please indicate by a tick ()
Managing owner	
General manager	
Departmental manager	
General employee	

2. What is your Gender?

Male	
Female	

3. What is employment profile/position?

Please indicate your age category

Age (in years)	Please indicate by a tick ()
Below 20	
21-30	
31-40	
41-50	
51-60	

4. What qualification do you have?

Grade 12	
Certificate	
Diploma	
Degrees	

5. For how many years you have served at an organisation?

Service duration	Please indicate by a tick ()
Less than 1 year	
1-3 years	
3-5 years	
5-10 years	
More than 10 years	

Part B: An assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay

6. What are your views regarding the general conditions of operations of the fisheries sector?

General conditions of operations	
State of the fishery sector	
Opportunities and challenges	
Possibilities for value addition	
Possible government assistance	

Please motivate your answer.

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7. What are your views regarding the sustainability of fish resources, such as the total allowable catch (TAC) policy, environmental and sustainability policies, international controls, and the role of the government?

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8. Do you strongly agree, agree, disagree or strongly disagree that rules of origin a problem on preferential trade, and Namibia’s export potential?

Rules of origin	Strongly Agree	Agree	Disagree	Strongly Disagree
Rules of origin is a problem on preferential trade, and Namibia’s export potential				
Rules of origin is not a problem on preferential trade, and Namibia’s export potential				

Please motivate your answer.

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9. What are the Challenges and Prospects for the Blue Economy Growth in Namibia?

Challenges and Prospects for the Blue Economy in Namibia	Please indicate by a tick ()
Indigenisation and a binding capital constraint	

The value addition policy drive	
Skills shortage and problems with boatmen's qualifications	
The challenging business environment	
Changing mind-sets and dealing with water scarcity	
Competition for coastal land and industrial (mis)classification	
Access to data	
None of the above	

Please motivate your answer.

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Thank You!

40 LOCAL INDIVIDUALS AND PREVIOUSLY DISADVANTAGED FISHING QUOTA HOLDERS IN SWAKOPMUND AND WALVISBAY QUESTIONNAIRE

Dear Participant(s),

My name is Sophia Florence Mouton (Mobile: +26481 223 0870), a postgraduate student at University of Cape Town. I am conducting research for the award of a Master of Commerce in Development Finance Degree. Please kindly assist in answering the research questionnaire for the collection of vital research data. You will answer this questionnaire anonymously and all research ethics will be complied with. Should you decide to exit the research process at any given stage, please feel free to do so.

Research Title: An assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay

Research Supervisor: Dr Mundia Kabinga (PhD)

Research Objectives

- To make an assessment of the Blue Economy in Namibia
- To determine whether the Namibianisation policy works
- To identify the challenges and prospects for the Blue Economy in Namibia
- To recommend how the blue economy in Namibia can be transformed to promote economic empowerment of local communities

Expected completion Time: 10 - 15 minutes

Fill in the blank spaces and tick the appropriate check boxes.

Part A: General information

Please indicate by a tick () to show your answer to the stated questions.

1. What is employment profile/position?

Item	Please indicate by a tick ()
Managing owner	
General manager	
Departmental manager	
General employee	

2. What is your Gender?

Male	
Female	

3. Please indicate your age category

Age (in years)	Please indicate by a tick ()
Below 20	
21-30	
31-40	
41-50	
51-60	

4. What qualification do you have?

Grade 12	
Certificate	
Diploma	
Degrees	

5. For how many years you have employed at an organization?

Service duration	Please indicate by a tick ()
Less than 1 year	
1-3 years	
3-5 years	
5-10 years	
More than 10 years	

Part B: An assessment of the Blue Economy in Namibia: a case study of Swakopmund and Walvis Bay

6. What are your views regarding the general conditions of operations of the fisheries sector?

General conditions of operations	
State of the fishery sector	
Opportunities and challenges	
Possibilities for value addition	
Possible government assistance	

Please motivate your answer.

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7. What are your views regarding the sustainability of fish resources, such as the total allowable catch (TAC) policy, environmental and sustainability policies, international controls, and the role of the government?

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8. Do you strongly agree, agree, disagree or strongly disagree that rules of origin are a problem on preferential trade, and Namibia's export potential?

Rules of origin	Strongly Agree	Agree	Disagree	Strongly Disagree
Rules of origin is a problem on preferential trade, and Namibia's export potential				
Rules of origin is not a problem on preferential trade, and Namibia's export potential				

Please motivate your answer.

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9. What are the Challenges and Prospects for the Blue Economy Growth in Namibia?

Challenges and Prospects for the Blue Economy in Namibia	Please indicate by a tick ()
Indigenisation and a binding capital constraint	
The value addition policy drive	
Skills shortage and problems with boatmen's qualifications	
The challenging business environment	
Changing mind-sets and dealing with water scarcity	
Competition for coastal land and industrial (mis)classification	
Access to data	
None of the above	

Please motivate your answer.

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Thank You!