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[An examination of key stakeholder's challenges for the implementation of the blue economy strategic policy (2018-2030), in Seychelles]

Chrissan Chrissan Barbe

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C. BARBE

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Abstract

Title of Dissertation: **An Examination of Key Stakeholder's Challenges for the Implementation of the Blue Economy Strategic Policy (2018-2030), in Seychelles**.

Degree: **Master of Science**

This study concerns the implementation of the Blue Economy Strategic Policy of Seychelles. In particular, it examines the causes of and potential solutions for the challenges that key stakeholders have been experiencing in the implementation of this policy. A contextual introduction to the study is provided which focuses on the relationship between human's ocean activities and marine resources. This provides information on the Blue Economic development of Seychelles, which has been substantially influenced by the large ocean spaces under its jurisdiction. Further, the study outlines how key stakeholders in Seychelles face a range of challenges that are hindering the effective implementation of its Blue Economy Strategic Policy (2018-2030). This establishes the need to examine and identify potential solutions.

The study then addresses the research methodology adopted. This involved a literature review, which discussed the evolution and components Blue Economy development. Further, the review compared stakeholders' challenges in implementing the Blue Economy strategy between, Grenada and the Solomon Islands, to gain comparative perspectives to help realise Blue Economy implementation for Seychelles. The study further used open-ended questions to examine the types of challenges and obtain a proposed solution from the key stakeholders.

The research findings observed several institutional and operational issues the key stakeholders face. This informed a discussion that aims to examine the challenges and the proposed solutions. The study then provides recommendations relating to the

establishment of a strong institutional and operational integration amongst key stakeholders within the government.

To conclude, the study found that though the Blue Economy is an ocean-related development, good institutional and operational integration among the stakeholders is essential to its effective realisation. The study provides a series of potential policy response options and action-oriented recommendations designed to assist Seychelles in addressing its unique issues for implementing the Blue Economy Strategic Policy.

KEY WORDS: Blue Economy, Key stakeholders' challenges, Strategic policy implementation, Small Island Developing States, Sustainable development.

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List of Abbreviations

ABT   Aichi Biodiversity Target

ABNJ   Areas Beyond National Jurisdiction

CBD   Convention on Biological Diversity

CLCS   Commission on the Limits of the Continental Shelf

DBE   Department of the Blue Economy

EEZ   Exclusive Economic Zone

EU   European Union

GDP   Gross Domestic Product

ICZMP   Integrated Coastal Zone Management Policy

IOI   International Ocean Institute

IOG   Integrated Ocean Governance

IORA   Indian Ocean Rim Association

LDC   Least Developing Countries

M&E   Monitoring and Evaluation

MNP   Marine National Parks

MPA's	Marine Protected Areas
MPR	Mascarenes Plateau Region
MSP	Marine Spatial Planning
nm	Nautical Mile
OECS	Organization of Eastern Caribbean States
POG	Pacific Ocean Governance
REC	Research and Ethics Committee
SSF	Small scale fishers
SDG	Sustainable Development Goals
SIDS	Small Developing Island States
SNR	Strict Natural Reserves
SOP	SOP
UN	United Nation
UNESCO	United Nations Educational, Scientific and Cultural Organization

Chapter 1

Introduction

1.0 Introduction:

The relationship between humanity and the oceans, and how its resources are being used and exploited, is progressing in several ways (Republic of Seychelles, 2018). It is increasingly recognised that as the ocean is an essential supply of resources for human use, such as food, renewable energy, and as the conduit for global trade through the shipping. Since more people are acquiring better understanding of the importance of these resources for human life on earth, they are also increasingly becoming more aware that these resources are not unlimited and are being affected by cumulative human pressures and impacts (UNCTAD, 2016).

The fact that humans should make use of the ocean's resources in a sustainable manner is undeniable. The ocean's space covers 70 percent of the earth's surface, which provides employment and investment opportunities to the communities, enhance livelihoods thus helping to eradicate poverty, provides essential human needs such as oxygen, minerals, and foods, absorbs greenhouse gases and provides trade (Republic of Seychelles, 2018).

Against this context, the "Blue Economy" concept has emerged in recent years to unlock the sustainable economic potential of the oceans (see Chapter 2 below). Broadly conceived, the Blue Economy concept aims to encourage social, economic, and environmental development while being mindful and ensuring sustainable development of the ocean (World Bank & United Nations, 2017). The fundamental

intents of this concept are to integrate socio-economic development through the sustainable use of ocean-related resources, activities and opportunities (UNCTAD, 2014 b).

Issues being faced by the ocean are manifold. For example, as a result of climate change, oceans are heavily impacted leading to challenges such as sea level rise, rising temperatures, ocean acidification and deoxygenation which are resulting in direct, and indirect impacts on ocean-related developments such as tourism, fisheries, and even port development projects (World Bank & United Nations, 2017). These issues are impacting the vulnerable countries, mainly coastal Least Developing Countries (LDC) and the Small Developing Island States (SIDS), due to the high reliance on ocean-oriented activities (Commonwealth Secretariat, 2013).

This study addresses the challenges being encountered by the key stakeholders within the public sector of Seychelles for the implementation of that country's Blue Economy Strategic Framework (2018-2030). The public sector is the primary mechanism being used by the government of Seychelles to coordinate and implement the Blue Economy development. The key stakeholders within Seychelles public sector are therefore an appropriate focus for this study while at the same time acknowledging that Blue Economy development is by no means solely an endeavour to be accomplished by government entitles alone. These key stakeholders in Seychelles' Blue Economy development are facing considerable challenges in implementing this Strategic Policy. Therefore, there is a necessity to determine the causes and identify potential solutions for these challenges, and this provides the core rationale for the present study. It is hoped and anticipated that the findings of this research can be used to develop recommendations and the formulation of a policy brief and assist the government in taking corrective actions to overcome the obstacles identified. This will facilitate the effective implementation of the Blue Economy and help to further unlock Seychelles Blue Economy potential.

1.2 About Seychelles, Ocean Governance and Management

This section of the chapter provides a contextual background concerning Seychelles, outlining the scope and importance of its vast ocean space and its resources that influence the initiation of the Blue Economy development in country, before discussing the development of its Blue Economy Strategic Policy.

1.2.1 Management of Marine Space

Seychelles is located in the Indian Ocean, to the north of Mauritius and Madagascar, east of Somalia and Tanzania, and west of Australia, has a population of 94,000 (Limits of the seas, 2014). It is an archipelagic state consisting of 115 islands, a combined land area of 455 km2, and an exclusive economic zone (EEZ) of approximately 1.4 million km2 (World Bank Report, 2017). This marine space is approximately 300 times bigger than all its combined land area. Consequently, while Seychelles is a small island state, it can simultaneously be considered a large ocean state (Safe Seas, 2017). Of particular importance in view of the Blue Economy focus of this study, Seychelles maritime space has been the main source of socio-economic growth in the country for the past two centuries, whereby the country has been highly dependent on the oceans activities and resources (Commonwealth Secretariat, 2013). The services and resources being provided from Seychelles ocean space are of great importance to the country as they provide transportation and potential trading, investment, and employment opportunities for the community. Additionally, marine areas and the living resources offer marine products such as fish for local consumption, an essential component in traditional food security (Republic of Seychelles, 2018). Additionally, coastal tourism has grown substantially in recent years such that the tourism and fishing sectors are recognised as the two main pillars of the economy (Commonwealth Secretariat, 2013).

These are the main reasons the government of Seychelles made the Blue Economy development an essential agenda on the country's national development programs. Since its socio-economic development is highly dependent on the resources and

services being provided from its ocean space, Seychelles has also recognised the necessity to establish its maritime limits and boundaries in accordance with the international regime with the United Nations Convention on the Law of the Sea (UNCLOS) 1982, which was ratified by Seychelles on 16th November 1994.

1.2.2 Establishing Baselines

Claims to maritime zones are measured from baselines along the coast of a coastal state. The baseline is the line distinguishing the territorial waters and the internal or archipelagic waters and it provides the line from which the territorial sea, contiguous zone, and the exclusive economic zone (EEZ)are measured (Yochifumi, 2019). Of particular note here, Seychelles is an archipelagic state, which is defined as "a State constituted wholly by one or more archipelagos and may include other islands" under UNCLOS article 46. Seychelles has been able to take advantage of this by establishing archipelagic baselines, in keeping with UNCLOS article 47, which consist of baselines: joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands and an area in which the ratio of the area of the water to the area of the land, including atolls, is between 1 to 1 and 9 to 1. Therefore, to effectively comply with the relevant provisions of the Convention, Seychelles established baselines of four archipelagos (Chang Tave & Coeur de Lion, 2019). The four archipelagic baseline systems of Seychelles are composed of 157 line segments, ranging in length from 0.1 nm to 7.6 nautical miles, with a total length of 398 nautical miles (nm) (Limits of the seas, 2014).

The four archipelagos are:

Group 1 Mahe Archipelagos (Figure 1).

Group 2 Providence, Farquhar, St Pierre Archipelago (Figure 1)

Group 3 Cosmoledo Astove Archipelago (Figure 2)

Group 4 Assumption Archipelago (Figure 2)
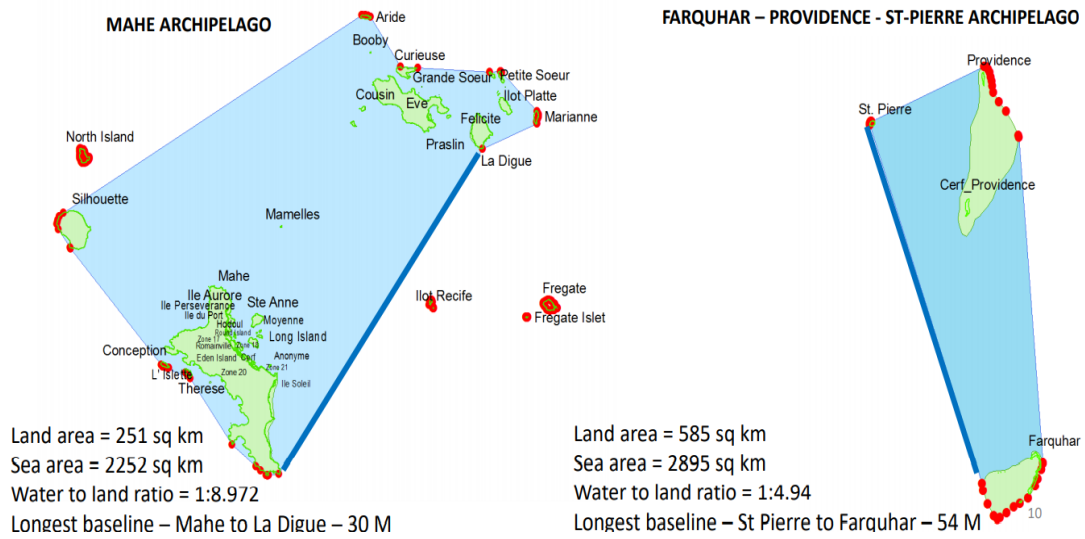
Figure 1. Mahe archipelago and Farquar-Providence- St Pierre archipelago. Retrieved from Chang Tave and Coeur de Lion (2019). Delimitation of Seychelles Maritime Spaces.
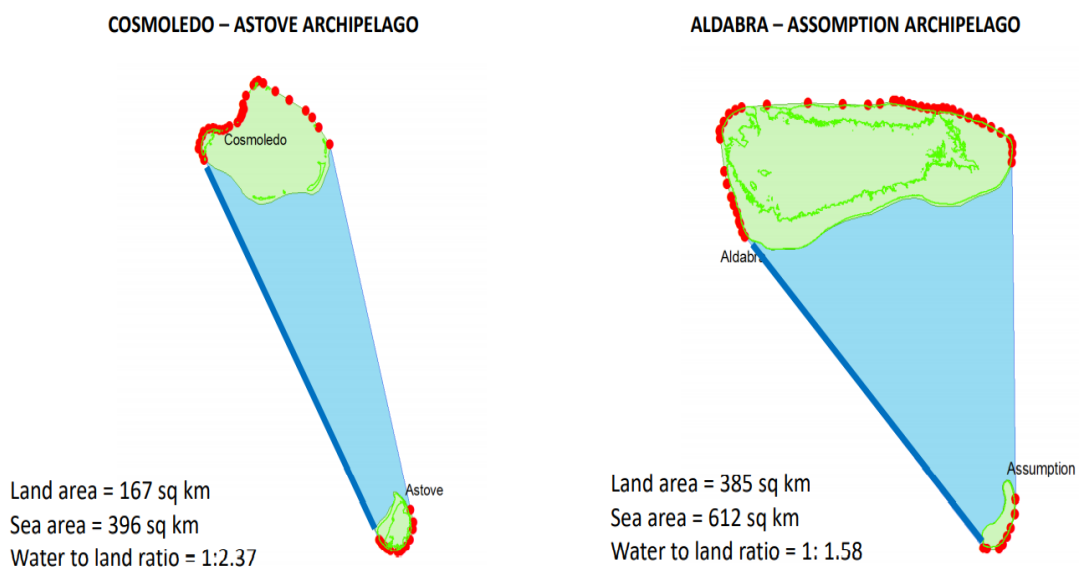
Figure 2. Comosledo and Astove archipelago and Aldabra-Assomption archipelago. Retrieved from Chang Tave and Coeur de Lion (2019). Delimitation of Seychelles Maritime Spaces.

However, concerns have been raised in regards to the four systems of archipelagic baselines established by Seychelles around distinct island groups. According the United States Department of State analysis, of the four systems, only one, relating to Group 4 is in alignment with the article set forth in UNCLOS article 47.1, whereby it meets the requirement for water-to-land area ratio (Limits of the seas, 2014).

In particular, for Groups 1,2, and 3, their calculated water-to-land area ratio is not in accordance with requirements under UNCLOS article 47.1(Limits of the seas, 2014). However, Seychelles has calculated different areas which suggest that its archipelagic baselines claims meet the requirements of UNCLOS, article 47. In part this is because the islands within Groups 2 and 3 are located above the Seychelles Bank, an underwater feature (Chang Tave & Coeur de Lion, 2019). Should these banks qualify as "part of a steep-sided oceanic plateau which is enclosed or nearly enclosed by a chain of limestone islands and drying reefs lying on the perimeter of the plateau," as stated in UNCLOS Article 47.7, then these Groups of islands would be in accordance with the requirements under UNCLOS article 47.1(Limits of the seas, 2014). However, in the case of the islands in Group 1, it does not seem that Seychelles Bank "enclosed or nearly enclosed by a chain of limestone islands and drying reefs lying on the perimeter of the plateau" as per article 47.7 (The Bahamas, 2014). Overall, it can be noted that three of the four sets of archipelagic baselines defined by Seychelles in 2008 with respect to the 9:1 water to land ratio allowed under Article 47 of the Convention. Consequently, Seychelles is in the process of revising its archipelagic claims to ensure that all issues are dealt with before the final computation of the maritime zones (Chang Tave & Coeur de Lion, 2019).

This both shows the advances that Seychelles has in terms of the definition of baselines and delimitation of maritime boundaries, as well as exposing some of the challenges the country faces as a small island developing state. However, there is recognition in Seychelles of the need to verify and, if necessary amend its baselines according to the international law of the sea in order to fully enjoy its potential resources and anticipated activities for the successful development of the Blue Economy.

1.2.3 Delineating the Extent and Outer Limits of Maritime Claims

Seychelles had claimed a territorial sea, contiguous zone, and an Exclusive Economic Zone (EEZ) of 12, 24, and 200 nm, respectively in accordance with the UNCLOS.

Seychelles has also made several submissions to the Commission on the Limits of the Continental Shelf (CLCS) in reference to its continental shelf located beyond 200nm from its baselines (Figure 3) (Limits of the Seas, 2014). Seychelles and Mauritius made a joint submission in December 2008 to share management of the Mascarenes Plateau Region (MPR), which now both countries have joint jurisdiction over continental shelves areas seawards of 200 nm limits totalling 396,000 km^2 (Department of Foreign Affairs, 2012). Another submission was made in May 2009, for the Northern Plateau (Limits of the seas, 2014), and Seychelles acquired official confirmation in August 2018, confirming its sovereign rights over areas of extended continental shelf measurings 14,800 km^2. Additionally, since May 2009, negotiations have also been proceeding between Seychelles and Madagascar concerning an area called the Aldabra Plateau, which is located around Atoll of Aldabra island region (Department of Foreign Affairs, 2012).

These submissions and confirmations granted could provide future exploitation and exploration opportunities for the economic, social, investment, and cultural development and wellbeing of Seychelles through the current and future Blue Economy development of the country, the joint exploitation of resources has the potential to foster and further enhance good cooperation between Seychelles and bordering states within the western Indian Ocean region. It is, however, recognised that the development of these potential resources located far from shore and frequently in deep waters is unlikely in the near term.
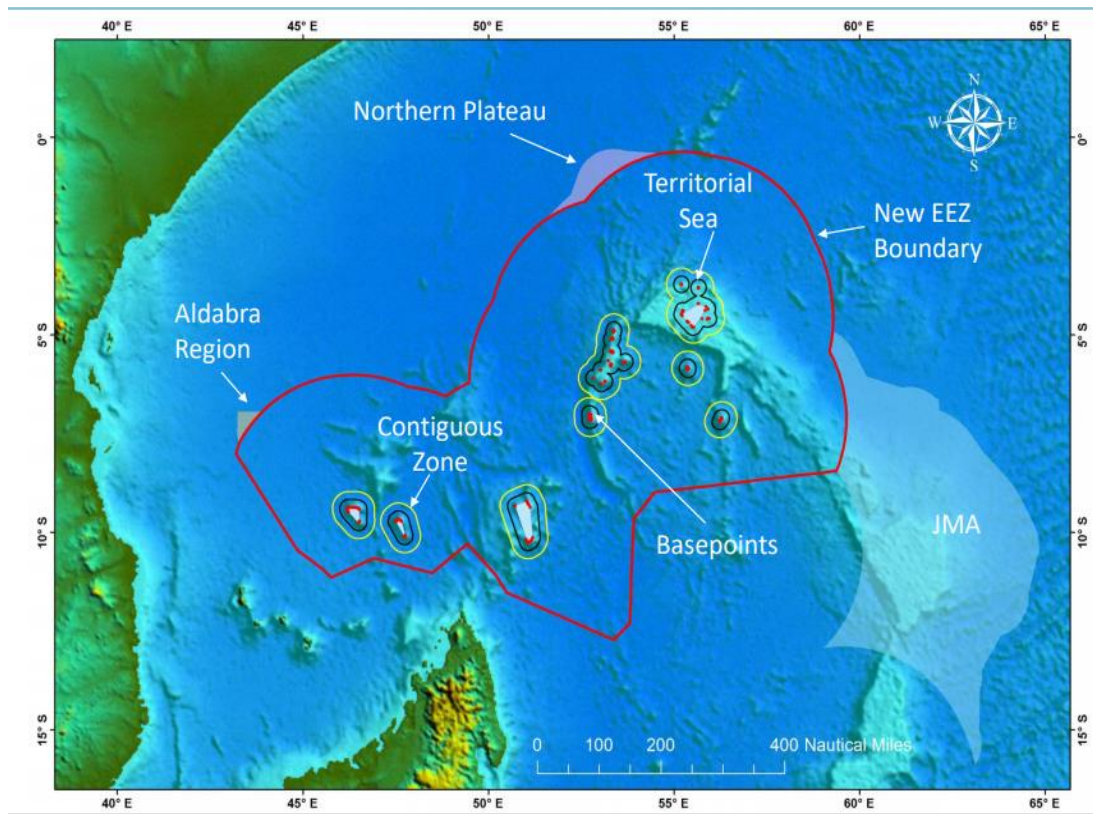
Figure 3. Illustrative Map of Seychelles' Maritime Boundaries and Joint Management Area with Mauritius and Continental Shelf beyond 200 nm. Retrieved from Chang Tave and Coeur de Lion (2019)**.**

1.2.4 Delimiting Maritime Boundaries

In instances where maritime claims of coastal states overlap, maritime delimitation is needed in accordance with Articles 74 and 83 of the Convention, which include provisions dealing with the delimitation of EEZ and continental shelf boundaries. Recognising that in order to fully realise Blue Economy opportunities for Seychelles, efforts have been made to clarify the maritime jurisdictional limits of the country. Seychelles has achieved significant progress in the delimitation of maritime boundaries with many bordering states within its region.

In 2001, Seychelles and Glorios Island finalised their maritime boundary agreement (Law of the Sea, 2001). In 2002, Seychelles and Tanzania concluded their maritime boundary agreement. Further, in 2008, Seychelles and Mauritius finalised their maritime boundary agreement (Law of the Sea Bulletin, 2009). Moreover, in 2012, Seychelles concluded it maritime boundary agreement with Comoros. It was during that same period, that an agreement on a tri-point has been finalised where Seychelles, Tanzania and Comoros boundaries come together (Safe Seas, 2017).

Going through these negotiations and agreements, there has been no maritime boundary disputes between Seychelles and its bordering states in the region. In fact, there had been an enhancement in regional and international corporation, as in the case of the joint management of the Mascarenes plateau between Seychelles and Mauritius (UN, 2012), as well as the bilateral agreement with France leading to a tripoint agreement with France (Reunion) and Tanzania (UN, 2001).

1.3 Seychelles Blue Economy Strategic Development

As an archipelagic state within the Indian Ocean, with a large ocean space, Seychelles has recognised the socio-economic opportunities that can be obtained in the adoption of the Blue Economy concept. Seychelles has been participating actively in promoting the Blue Economy since 2014 as a core approach towards sustainable development at some national and international fora (Agripine et al., 2014).

In 2016, the government of Seychelles established the Department of the Blue Economy, located in the Vice President office and developed its Blue Economy Strategic Policy Framework and Road Map 2018-2030 – usually referred to simply as the "Road Map." The Road Map specifies the key actions for the Blue Economy development. It integrates the components of social, economic, and ecological development as an approach to sustainable development, in accordance with the Sustainable Development Agenda (2030) (UN, 2015a).

The Road Map is built on existing legal and policy frameworks to facilitate the delivery of proposed actions while being led by the government (Agripine et al., 2014). It addresses cross-cutting functions, which involve multi-sectoral participation of leading ocean-oriented sectors in Seychelles (Figure 4). It further promotes initiatives such as innovative financing and projects such as marine spatial planning (Republic of Seychelles, 2018).

Figure 4. Multi sectoral approach of the Blue Economy of Seychelles. Retrieved from the Seychelles Blue Economy Strategic Policy and Road Map (2018-2030).

The Road Map is categorised into two sections. Section one articulates the Blue Economy vision, strategic priorities, and the principles.

The vision set out in Seychelles Blue Economy Strategic Policy is as follows:

> To develop a Blue Economy as a means of realizing the nation's development potential through innovation and knowledge-led approaches, being mindful of the need to conserve the integrity of the Seychelles marine environment and heritage for present and future generations.

This Vision Statement encapsulates seven overarching Blue Economy principles: economic efficiency, sustainability, social equity, resilience, innovation, transparency and accountability and partnerships (Figure 4).

Strategic Priorities:

1. Creation of wealth

2. Sharing prosperity

3. Securing healthy and productive oceans

4. strengthening the enabling environment

Section two, address sustainable development in existing focus areas, while, at the same time, seeking to advance investment opportunities in emerging sectors (Republic of Seychelles, 2018).

The national development of the Blue Economy development builds on existing developments in sectors such as fisheries and tourism (Seychelles News Agency, 2015). This development has potential benefits that can be seen, as an example, through the ongoing port expansion project to support maritime transport activities (World Bank Group, 2016). The Port of Victoria is a multi-operational port facility that caters to several Blue Economy activities, from fisheries, seaborne trading, cargo handling, and even cruise ship operations. Ongoing projects are currently underway to modernise its services, expand its infrastructure, and improve its safety services being provided (Republic of Seychelles, 2018). The government aims to diversify the revenue being provided by existing sectors such as fisheries and port management. These will ensure socio-economic benefits to the country by providing potential

employment and investment opportunities while protecting the environment (World Bank Group, 2016).

1.4 Sectoral involvement

The Blue Economy of Seychelles is a multi-sectoral approach with the active involvement of the private sector, public sector, and civil society. It therefore adopts what can be considered to be a broad and complicated approach that aims to integrate multiple actors spanning several sectors. It evolves around the existing sectors such as fisheries, environment, finance, maritime security, port management, entrepreneurship, investments, health, education, tourism, and development banks (Republic of Seychelles, 2018). Additionally, the policy includes a focus on the emerging sectors such as research and development, biotechnology and renewable energy. It aims to bring together all these stakeholders to promote research for effective decision making and evaluation (Livingston et al., 2010).

1.5 Problem Statement

The Seychelles Department of the Blue Economy (DBE) received the latest version of the Blue Economy Strategic Policy and "Road Map", in early 2019. As a result of the publication of the Road Map, several studies and analyses were conducted, in which the researcher participated actively. As a Principal Policy Analyst form the Department of the Blue Economy the researcher was tasked with analysis for the Road Map, establishing policy coordination amongst the stakeholders, organising a policy dialogue with key stakeholders, identify the key actions to be undertaken, clarifying responsibilities and developing an implementation strategy for the strategic policy.

The present research builds on this practical experience. As a result of this process, 115 key actions and 24 key stakeholders were identified for future implementation purposes. It is to note that all these 24 key stakeholders are public entities from the public sector, which have been considered the leading sector for the Blue Economy development.

Subsequently, it was deduced that there was a need to have in place an effective Strategic Operational Plan (SOP) and Monitoring and Evaluation (M&E) arrangements at the national level to enable the Road Map and ensure its ongoing development. In addition, it was realised that responsibilities across relevant national institutions and key stakeholders would have to be allocated and confirmed.

The DBE thereby proceeded with the stakeholders' dialogue and strategic alignment exercise as an initial phase towards developing the Strategic Operational Plan (2020-2024) to harmonise, align, and prioritise the key actions in the Roadmap. This was achieved through interactive dialogue and working sessions with the 24 key stakeholders (Public Sector). Much of this engagement was conducted on a door-to-door basis, for the effective alignment and gathering of strategic information, of which the researcher was part of the process.

Towards that end of the exercise, the 115 key actions identified prior to the alignment exercise were reduced and converted into 55 mutually agreed. This was due to intensive dialogue and working sessions, whereby the actions were adjusted, merged, updated and prioritised, to synchronise with the current strategic operation of respective institutions. Nonetheless, due to resources and time constraints, the Department was unable to conduct the validation meeting with all the key stakeholders to advocate and confirm the exercise results, something which has further delayed the development of the operational plan as anticipated.

However, it was noted during the exercise that the scope of Seychelles' Blue Economy development is quite broad. Moreover, more than 65% of the key stakeholders were facing several issues across the public sector, which hindered their participation and even increased their disinterest in the importance of the Blue Economy's national development. These problems to Blue Economy-oriented sustainable development raised the concern of the Department of the Blue Economy, on the types, causes of these impediments, and how these challenges can be solved. As an officer of the Department of the Blue Economy, this naturally became an appropriate focus for the present researcher to examine these challenges being faced by these key stakeholders,

for the implementation of the Blue Economy Strategic policy and Road Map 2018-2030, in Seychelles.

1.6 Objectives

Main objective.

The overarching objective of this study is to critically examine the nature of the challenges faced by key stakeholders and chart ways to overcome them in order to help to realize blue economic growth for the Seychelles.

Sub objectives:

1. To determine the type of challenges being encountered by the key stakeholders in implementing the Blue Economy Strategic Policy and Road Map (2018-2030), in Seychelles.
2. To define the impact of these challenges on the Key implementers and on the implementation of the Blue Economy.
3. To determine the causes of these challenges.
4. To compare stakeholders' challenges in the implementation of Blue Economy Strategy between two small island development states, to help to realize blue economic growth for the Seychelles.
5. To explore and propose potential options for corrective actions for these challenges in Seychelles.

Questions

1. What are the types of challenges being encountered by the Key stakeholders, for the implementation of the Blue Economy Strategic Policy and Road Map (2018-2030), in Seychelles?
2. What are the impacts of these challenges on key stakeholders and specifically what are the impacts on the implementation of the Blue Economy?
3. What are the causes of these challenges?

4. What are the stakeholders' challenges being encountered in the implementation of the Blue Economy Strategy from two small island development states, to help to realize the Blue Economy growth of Seychelles?

5. What are the potential options for corrective actions?

1.7 Justification for the study

To understand the importance of this study, one must have an idea of how essential the Blue Economy development is for the socio-economic growth of Seychelles. The connection between the economic development of Seychelles and the ocean is fundamentally influenced by the enormous ocean spaces, and thus the significant marine resources, within its maritime jurisdiction, which contribute immensely to the livelihood of the community (Republic of Seychelles, 2018). The Seychelles has a land mass area of only 455 km^2 and a population of 94,000, but an EEZ is 1.4 million km^2, which is among the 25th largest in the world and second largest in Africa (SMSP Seychelles, 2019). Thus, as noted earlier, the Seychelles is clearly a very small island state; it is also undoubtedly a very large ocean state.

Being a Small Island Developing State (SIDS), the social and economic development of Seychelles is highly dependent the goods and services being provided from its ocean space (World Bank Group, 2017). The fisheries and coastal tourism sectors are the two main pillars of the economy of Seychelles (Domingue, Payet & Shah, 2001). Traditionally fishing has been a key activity in terms of providing livelihoods and with respect to food security. The fisheries sector has, however, developed considerably in recent decades with the advent of industrial commercial fishing and fish processing, the fisheries sector contributed up to 20 percent of the country's Gross Domestic Product (GDP), in 2005. However, during the past 10 years the same sector has increased its contribution up to 30 percent (Martin, 2011).

While the fisheries sector is clearly an important component of the economy of Seychelles, tourism, and especially coastal-oriented tourism, represents the primary pillar and driver of the economy, is making a contribution up to 55 percent of the

country's GDP (Republic of Seychelles, 2018). In terms of livelihoods, the fisheries industry provides employment opportunities up to 10 percent of the national workforce, while the tourism industry provides approximately 23 percent of employment opportunities of the workforce (World Travel & Tourism Council, 2015).

In terms of health and food security, the ocean space of Seychelles has long provided and continues to offer an essential source of nutrition to the community. Fish represents the main source of protein in Seychelles (Republic of Seychelles 2018). This high dependence on fish as a source of food is primarily due to Seychelles limited agricultural potential stemming from a lack of agricultural land, something which also leads to a high reliance on food importation (Seychelles Bureau of Statistics, 2017). Moreover, Seychelles is very active and as an island state inevitably dependent on sea borne global trade. Sea borne trading opportunities boost economic development through increased investment, employment and reduced prices of goods to customers (Republic of Seychelles, 2018). All these benefits are facilitated through its main port, the Port of Victoria, which is the main import and export hub. Additionally, Port of Victoria is well known for its major Tuna fishing fleet and facilities for cruise ships operating within the Indian Ocean (Safe Seas, 2017).

For the effective management of these goods and services within its ocean space, Seychelles established its maritime boundaries with neighbouring states such as Reunion, Tanzania, and Mauritius (see chapter 1. 2 and figure 3).

All these activities show the importance of the ocean space and its resources to Seychelles which have influenced and led the government to initiate the Blue Economy as an essential avenue for the development of the country (Republic of Seychelles, 2018). The country did establish a Blue Economy Strategic Policy (Road Map) to coordinate the implementation of the activities on a national level. This approach requires the active participation of all its key stakeholders, which are currently experiencing several challenges.

The identification of these potential barriers being faced by key stakeholders in the implementation of the Blue Economy Road Map in the Seychelles is an important

consideration. Fundamentally, if these challenges are not clearly identified, rigorously examined and addressed accordingly there is a risk that key stakeholders will become demotivated and disillusioned with the Blue Economy Strategic Policy. This is highly problematic as these key stakeholders are the spearhead of the Road Map. Thus hinder the effective implementation of the Blue Economy developments in Seychelles, something that it is currently a champion for.

Therefore, there is a necessity to intensively examine the challenges being encountered by these key stakeholders from the public sector, for the implementation of the Blue Economy Strategic Policy and Road Map 2018- 2030, in Seychelles. This is the primary motivation and objective of the present study.

Chapter 2

Methodology

2.0 Introduction

This chapter presents the methods used for the study. It includes the research design, population of the study, data collection, and data classification processes. Since the literature search was part of the data collection process, then such discussions are presented in chapter 3.

2.1 Research Design

The use of a qualitative paradigm was applied to the research. It helped examine human opinions, and understood underlying reasons and problems (Kothari, 2004). The study is primarily descriptive as this type of study can easily characterize the problem being researched (Mwape & Mumba, 2012). This was considered appropriate to the study, which aimed to gather and distill the views of stakeholders on their perceptions of barriers or obstacles to the implementation of Blue Economy-oriented development plans and initiatives in Seychelles. However, in the latter stages, the information gathered was collated, synthesized, and critically evaluated to deliver policy-oriented options and recommendations that will help inform the development of practical responses to the problems highlighted.

2.2 Study Population

For this study, a targeted population of 24 key stakeholders of the Blue Economy development were selected (see table 1). This selection was informed by the fact that, as noted at Section 1.5, Seychelles has already identified these stakeholders as the key or most important ones for the implementation of its Blue Economy Strategic Policy. A process that the researcher was engaged in as a Principal Policy Analyst. Given the limited number of key stakeholders involved, all 24 were selected and approached as part of the study.

Table 1 List of 24 key stakeholders of the Blue Economy Development of Seychelles.

No.	Key Stakeholders
1	Department of Fisheries
2	Department of Tourism
3	Department of Foreign Affairs
4	Department of Environment
5	Department of Industry and Entrepreneurship Development
6	Department of Employment
7	Department of Health
8	Department of Energy and Climate Change
9	National Institute of Science, Technology and Innovation
10	Marine Security
11	Seychelles Investment Board
12	Seychelles Maritime Safety Authority
13	Seychelles Seychelloise d'Investissement Limited
14	Entrepreneurship Seychelles Agency
15	Department of Culture
16	Seychelles Port Authority
17	Ministry of Education

18	Department of Investment
19	Department of Trade
20	Department of Finance
21	Department of Economic Planning
22	Department of Agriculture
23	Department of Civil, Aviation, Port and Marine
24	Department of Information Communication Technology, Caravel House,

The study population therefore comprises of all the key stakeholders and leading public institutions tasked with implementing Road Map and are therefore fully aware of the issues being faced. They are the ideal participants for the proposal of solutions in this development.

2.3 Data collection

The study was conducted by the use of open-ended questionnaires (see Appendix 2). This data collection method was considered appropriate because it offers the respondents an opportunity to provide a wide range of answers and do not limit the kinds of responses being sought for the study (Hyman & Jeremy, 2016).

This study also gathered information through a literature review in order to provide a more in-depth insight and background of the topic being addressed as well as to assist the analysis of the researcher.

In addition, a comparative case study approach was adopted to examine the existing key stakeholders' challenges in the implementation of the Blue Economy strategy. Two other small island developing states, which were selected as being similar to Seychelles in certain aspects such as SIDS status, large ocean space, small land area and small population size but located in dissimilar regions (World Bank Group, 2017). These are, the Solomon Islands being located in the Pacific Ocean and Grenada in the Atlantic Ocean. Nevertheless, both show the same interest in the strategic development of the Blue Economy and their stakeholders are facing several challenges, thus

providing potential scope for comparison. Further, as a practical consideration, due to limited availability of information, it has been easier to acquire information based on these island states than the others. The comparative study approach enhanced the understanding of the topic examined. Additionally, the challenges, similarities, and differences were compared for further analysis and informed the objectives of the study (Zainal, 2007).

The gathered results were categorized into themes through the use of Qualitative Data Analysis (QDA) miner software. This software facilitated classification of data as per respective themes from the responses and organized the data for analysis (Lee et al, 2009). The results are presented into in Appendix 1. The benefits of using this software are that it saves time, increase transparency, and improve accuracy (Lewins & Silver 2007).

2.4 Ethics Clearance.

This study's questionnaire went through an approval process, conducted by the Research and Ethics Committee (REC) of the World Maritime University (WMU), Malmö. As per the research guidelines, a confidentiality agreement was signed, and the data collection tools shall be destroyed after this study. Therefore, each respondent shall be addressed as Respondent 1, 2, 3 …. etc., for integrity and confidentiality purposes.

Chapter 3

Literature review

3.0 Introduction

This chapter provides a literature search on the evolution of the Blue Economy concept, which is central to the overall study of stakeholders' challenges in implementing the Blue Economy Strategic Policy and Road Map in Seychelles. Accordingly, it is important to understand the history of the Blue Economy idea, how it emerged and progressed from the "green economy" paradigm which has the objective of ensuring integrated and sustainable development. It will then provide information on the Blue Economy concept's strategic policy development and the challenges being encountered by stakeholders in a comparative example from two countries from the Pacific and Atlantic Ocean. This aspect of the study is considered to be essential for further analysis and helps address the stakeholders' challenges for implementing the Blue Economy strategy policy in Seychelles.

3.1 Genesis of the Blue Economy

It has been noted by numerous commentators that the Blue Economy emerged at the 2012 United Nations Convention on Sustainable Development (UNCSD), or Rio +20 Conference (Smith-Godfrey, 2016).   In this context, the Blue Economy concept was promoted as the marine dimension of green economy development concepts. However, it can be argued that the Blue Economy concept was initiated many years before the Rio +20 Conference.

Indeed, the origin of the concept of sustainability began many years ago, when there was a rapid growth in the human population, which led to the high consumption of resources during the Industrial Revolution. This raised the concern that resources such as wood and coal would be depleted if service providers and consumers are not educated on the sustainable use of these resources (Van Zon, 2002). This can lead to changes in the way of thinking for many people, which prepared a pathway for the rise of global sustainable development (Marsh, 1965). It was in the 1980's that the new concept of sustainable development became very popular amongst many states. This occurred during the period when the United Nation (UN) established the strategic environmental development program for many countries, which is known as the Brundtland Commission, produced the document entitled *Our Common Future* (World Bank and United Nations, 2017). This report raised the awareness that social equity, economic development, and environmental preservation can be achieved simultaneously and were advocated as the core components of sustainable development (Sustainability Reporting Program, 2000). *Our Common Future* placed emphasis on the application of an integrated approach to address issues concerning population growth, food security, poverty, and biodiversity (Imperatives, 1987). It extends its concern towards the pressure that exists between economic development and environmental preservation. The report acknowledged the importance of economics for many countries but highlighted that the need for them to be mindful of sustainable development, which is safer for environmental development as well as for human and well-being (Du-Pisani, 2006).

However, the concept of sustainable development has always been critiqued. Some are of the view that the sustainable use of non-renewable resources at any continuous rate, will lead to the depletion of such stock (Turner, 1988). Further, some view the concept as one that has been overextended from 'conservation management' to 'economic development', and that the Brundtland report made emphasis on nothing but on the common strategy of the global development (O'Riordan, 1993).

On the other hand, to support the implementation of sustainable development, the green economy was initiated in the year 1990s, as a pathway to address environmental issues and simultaneously promote social and economic development in a sustainable manner (Loiseau et al, 2016). The green economy became quite popular among many states as a concept that brings to completion the principle of environmental preservation as an element that affects economic development, but was seen to bring harmony between the economic and environmental development. Whereby environmental development can be seen as an opportunity for economic growth rather than a barrier (Vera, 2016). Though the green economy idea was emerged as a path way to land-based environmental management, it has progressively evolved from a land to ocean approach.

A new approach to sustainable development, particularly of oceans and their relationship to the land, was initiated by Elisabeth Mann Borgese, the founder of the International Ocean Institute, which influenced the world in viewing sustainable development from a new perspective (Baker, 2012). This was a new way to view sustainable development, from an ocean to land perception, instead from the land to ocean perception only, to provide sustainable solutions to the increasing ocean-related impacts and issues (Behnam, 2014).

Further, another contribution towards the initiation of the blue economy began in 1994, when the economist, Paul Gauti, established the Zero Emissions Research and Initiative (ZERI). This represented a fresh way of doing business by addressing basic human needs through ecosystem preservation and innovation was introduced (Smith-Godfrey, 2016). However, it should be noted this term of "Blue Economy" was not introduced to emphasize on oceans-oriented development only, but rather a new perception of the "green economy".

These developments and paradigm shifts progressively led to the evolution of the Blue Economy as an emerging concept for the sustainable management of natural marine and freshwater resources in the Rio +20 Conference. However, since then, several

states have raised concerns on the definition and scope of the Blue Economy, of which such shall be the basis of discussion in the following section.

3.2 The Concept: Competing Definitions

The 'Blue Economy' concept was promoted during the 2012 United Nations Conference on Sustainable Development or Rio Summit 2012 (Silver et al, 2015). It is a developing concept that acknowledged the need for economic development through ocean resources and while preserving the marine ecosystem. This concept's fundamental aim is to establish a dialogue platform for many oceans state, which could influence social inclusion, environmental conservation, and economic growth through oceans and its resources while being mindful of sustainable development (Islam, Rahaman, & Ahmed, 2018). However, during its evolution, there had been a lack of clarity on its definition. Many states have even attempted to propose their definition of the concept.

One of the earliest attempts to analyse and define the Blue Economy's problematic definition was by Silver et al (2015), which identified the four main components:

1. Oceans as natural capital
2. Oceans as good business.
3. Oceans as integral to Small Island Developing States (SIDS)
4. Oceans as Small scale fishers (SSF) livelihoods (Silver et al 2015).

Other components identified through the evolution of the concept, are the following identified by the Pacific Ocean Governance (POG):

1. Community engagement.
2. Technical capacity,
3. Economic sustainability,
4. Ecosystem resilience,

5. Institutional integration.

The POG emphasised the components of institutional integration and technical capacity as the supporting factors of the Blue Economy development for the effective integration of ecological, economic, and social sustainability (Johannes, 2002).

In addition to other views on the components. The World Bank stated that these components can be categorised into the following, as well:

1. Traditional ocean industries such as tourism.

2. Emerging activities such as aquaculture.

3. Ocean ecosystems services, for which markets do not exist.

4. Human activity such as carbon sequestration (World Bank, 2017).

As a dynamic intergovernmental organisation from the Indian Ocean, Indian Ocean Rim Association (IORA) defined the Blue Economy as direct and indirect support to the effective operation of ocean-oriented sectors. At the same time, addressing ecosystem and environmental issues that are caused by human pressures and related impacts on marine resources (Mohantyet al., 2015). In other contexts, although including the word "economy", it has been observed that the Blue Economy concept does not integrate easily with the usual understanding of the term, which focuses on production and resource allocation and distribution. Instead, Blue Economy can align more easily with ecological economics, and socio-ecological terms since the Blue Economic reflects more on the relationship between ecology and human economics (Xepapadeas, 2008). From this perspective, the Blue Economy is revealed as a link between human economies and ecosystems and shows the harmony between humans, the economy, and the ecosystem (UNEP).

In other scholarly articles such as *The Complexity in Small Island Developing States (SIDS),* it is stated that the Blue Economy is a concept still being defined, which

currently include ocean-oriented activities that contribute to the improvement of livelihood and well-being. At the same time, it maintains a focus on conserving the environment and reducing environmental risks (Everest-Phillips, 2014). On another note, *The Economist*, sees the Blue Economy as an economic activity which establishes an equilibrium with the preservation of the marine ecosystem and supports healthy oceans (Smith-Godfrey, 2016).

There are many similarities among these definitions and components of the Blue Economy, which integrates economic growth, social inclusion, and ecological development. This is because the Blue economy aim to improve livelihood of the society through sustainable use of ocean resources, while enhancing the positive relationship between human, economic and ecology (Commonwealth, 2016). Due to its evolving nature, "there is no one size fits all" definition or components of the Blue Economy, but depends on the national priority of the adopting state, mainly based on their socio-economic and environmental situation (Ababouch, 2015). Therefore, each state is responsible for weighing and analysing the needs and priorities of their respective sectors and the decide their scope and components of their Blue Economy (World Bank Group, 2017).

3.3 Challenges being faced by Small Island Development States in the development of the Blue Economy.

Having large ocean spaces, and being highly dependent on the goods and services being provided by from the oceans. The SIDS have been among the leading proponents of Blue Economy development as such contributes to improving the livelihood of society and economic growth (Whisnant & Reyes, 2015). SIDS are mainly located in the Indian, Pacific, and Atlantic Ocean. They face several challenges due to their geographical locations and their small land area, surrounded by massive oceans space (World Bank Group, 2017). The SIDS have generally seen the Blue Economy development as an opportunity to address several of their inherent challenges such as, their undiversified economy, climate change, and small population size (Briguglio, 2014), as well as their limited resources, specialised skills and capacity to which many

SIDS are prone (World Bank Group, 2017). Many of the SIDS are remote and separated from other states' essential services, such as major trading markets hubs, thus resulting in high communication and transportation costs (Common wealth Secretariat, 2016). Therefore, having a Blue Economy Strategic Policy is viewed as an essential component of their national development strategy in order to create opportunities to overcome these challenges.

3.4 Strategic Policy Implementation of the Blue Economy.

This study is focused on examining challenges in reference to the implementation of the Blue Economy Strategic Policy of Seychelles. Consequently, this section aims to discuss the nature of strategic importance in such development. Strategic policy is a document that provides guidance and indicate direction for the performance of activities on medium term or long term basis. It aims to provide the processes for the achievements of objectives through activities and solving problems (Buşmachiu, 2012). Strategic policies provide guidance to decision makers in organising program and addressing problems to achieve the targets. Such policies ideally offer a framework that provides directions through the principles good governance, such transparency, accountability, effectivity and efficiency. Accordingly, strategic policies aim to organise and simplify goals as well as to guide how the responsibilities stakeholders and how priorities are to be addressed (Martin, 2010).

In implementing the Blue Economy Strategic Policy, it is crucial to examine the existing public administrative function, identify challenges, and improve the sectoral operation (Ibrahim, 2018). To obtain such achievement, the public administrative system should ensure that strategic information are properly gathered, stored in a transparent and accountable manner (ECA, 2016). Such information would facilitate the tracking of the strategic implementation progress. In addition, a country must influence active leadership involvement, strong political influence, and gather the experience of other states implementing a similar project (Commonwealth Secretariat, 2016).

However, in line to the objective of this study, it is vital to further examine stakeholders' challenges for the effective implementation of the Blue Economy Strategic Policy, of small island developing states in a broadly similar situation to Seychelles. Grenada and the Solomon Islands have been selected for the purpose of this comparative analysis with discussion elaborated in the following section.

3.5 Comparative case study of Solomon Island and Grenada

This section examines the differences and similarities between the Solomon Islands and Grenada with the Seychelles with specific regard to stakeholders' challenges being encountered in implementing their Blue Economy strategies. The objective of this comparative evaluation is to discern insights from the experience of other SIDS, which are similar in size and experiencing analogous challenges even if located in different oceans, in order to help realise Blue Economy growth of Seychelles. Therefore, to better understand the stakeholders' challenges, this article now turns to an examination of the two cases.

3.6 Solomon Islands

Though a small island developing state, Solomon island has approximately 1000 islands, with a combined land space of 28,000 km^2 (Figure 5), which provides a living place for a population of 516,000 people (Silver et al., 2015). It's capital city, Honiara is experiencing rapid urban growth, which is the fastest within the region. However, this rapid growth affects economic growth and leads to insufficient production and development of the country. Among 187 states, the country is ranked 142 on the Human Development Index (Barclay, 2013).
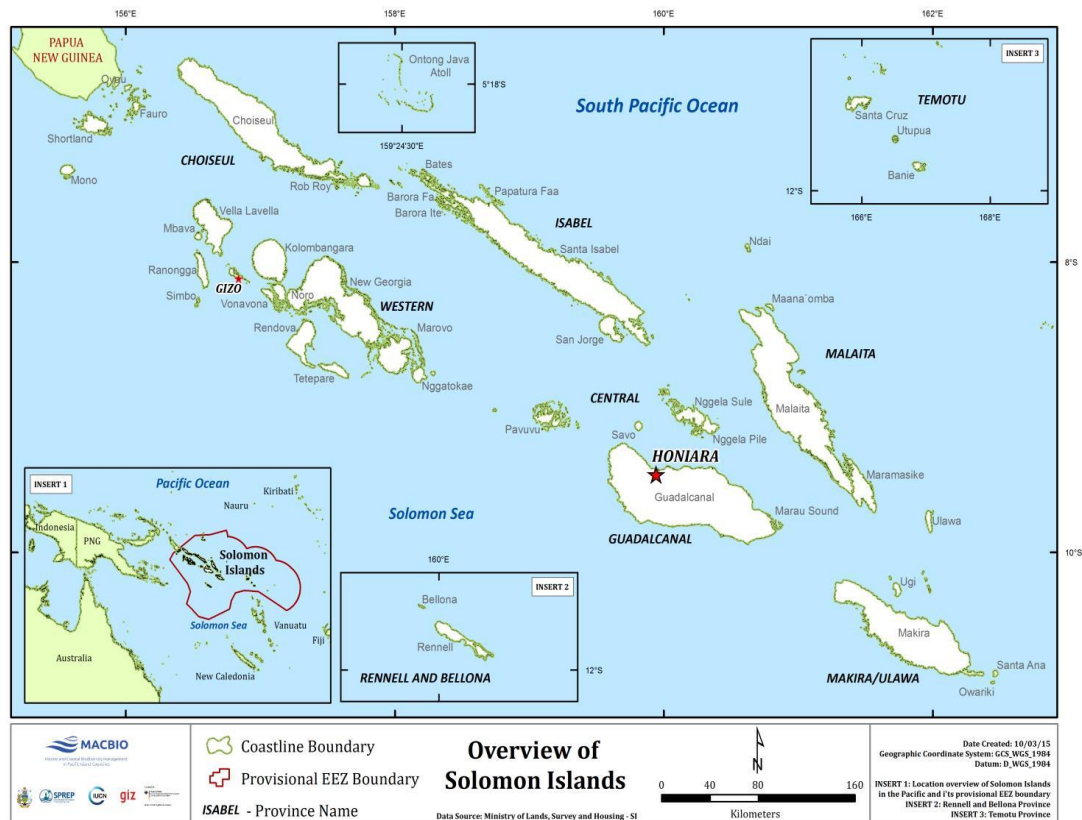
Figure 5. Overview of Solomon Islands. Retrieved from http://macbio-pacific.info/wp-content/uploads/2016/03/solomon-islands-map.jpg

Approximately 80 percent of its people, live in the rural area and relies on agriculture and small artisanal fisheries as the main contributors to employment, income, and food (SPC, 2016). Due to the country's large ocean spaces, the population predominantly relies on fish products as the main source of protein provision (Andersen, Thilsted & Schwarz, 2013). However, due to the issue of fast urban growth, extreme weather change, and the rising pressure on the fishing, there are increasingly heavy impacts on the reef fisheries. This has led to concerns that the stock might be in a critical state to serve the future food security and needs of the country (Bell, 2009). The existing government approach does not have the required resources and capacity to effectively govern the country's rising fisheries issues (Govan, Kinch & Brjosniovschi, 2013). Moreover, Solomon island's food security strategy is being provided at the cost of the marine ecosystem degradation within its coastal area (Brewer, 2011).

3.6.1 Blue economy Strategic development

The government representative from the Solomon Islands, in 2015, discussed in a meeting held at the Inaugural Ocean Summit in Honiara, on the values, resources, sustainable development, and preservation priorities that the ocean space of Solomon has in place. The discussion came to the following conclusions:

• The ocean is valuable to the people of Solomon island

• It provides resources to many industries and individuals

• The ocean resource and services are being threatened

• More action is required for effective management of the ocean (Keen, Schwarz & Wini-Simeon, 2017)

The summit also concluded with a vision which articulated as:

> A healthy, secure, clean and productive ocean, which benefits the people of the Solomon Islands and beyond.

This vision incorporates a group of 12 government agencies with the main aim to ensure that the oceans and its resources are well managed and preserved for the benefits of its population for present and future generations. However, due to lack of resources and capacity, Solomon had to prioritise these elements down to the following:

• Marine Spatial Planning (MSP)

• Ocean Policy

• A legal framework for both of the above

• Capacity development to support IOG, and

• Sustainable financing, also to support IOG (Ceccarelli, 2018).

3.6.2 Stakeholders' challenges in the implementation of IOG strategy.

Being led by 12 government entities, the implementation of the IOG took a multi-sectoral approach, which involves the participation of multiple stakeholders and government agencies (Keen, Schwarz & Wini-Simeon, 2017).

The main challenges being encountered by the stakeholders in the implementation of the IOG are that, at present, the government procedures, processes and policies are not well coordinated among the public sector actors, with limited vertical and horizontal integration, as a result of the usual silo operation by several public entities (UN, 2018). Additionally, the country is currently encountering legal issues to clarify rights and jurisdiction over its ocean space, leading to poor management of its ocean resources. The heavy occurrence of local meetings and overseas workshops and conference being attended by staff is also viewed as affecting the workloads and thus productivity of government staff of several entities. Also, there was a lack of outer island consultation programs throughout the policy development as such is very costly (Ceccarelli, 2018).

A further issue of concern is that many sectoral legislations are outdated thus resulted into the existence of an inefficient legal framework within many organisations (UN, 2018). The stakeholders are also being affected by a lack of skills, capacity to address such national development. Also, the are experiencing constraints on the availability of resources since they are operating in a low-income country (Keen, Schwarz & Wini-Simeon, 2017).

3.7 Grenada Island

The Island of Grenada is located within the Atlantic Ocean, in Trinidad and Tobago's northern area and southern from Grenadine (Figure 6). As a SIDS it has a coastline of 121 km^2 and an area of 344 km^2. Its EEZ is 75 times larger than its land space with a sea space of 26, 000 km^2 (CARICOM Regional Workshop, 2019). Grenada's population is 111,959, of which most of them live on the largest islands being

Carriacou and Petite Martinique. Grenada is a world leader in the production of spices. It has been rated at the second position worldwide for the production and supply of nutmeg, contributing up to 20 percent of the international supply (Benjamin, 2019). Grenada has also been a popular exporter for the supplies of mace, cloves and cinnamon (Commonwealth Secretariat, 2016). Besides being an exporter of spices, Grenada has a tourism-based economy, under the slogan of "Pure Grenada: The Spice of the Caribbean" (World Bank, 2016).

Grenada faces many challenges such as climate change, high unemployment rate, mismanagement of resources, and poverty. Poverty is mostly in rural areas whereby most people obtain their income from farming products. Approximately 13 percent of the population are recorded as poor and 13 percent are extremely poor (Benjamin, 2019). These challenges are being influenced through the occurrence of poor planning of coastal development, human pressures and over exploitation of ocean's resources (Commonwealth Secretariat, 2016).

Figure 6. Geographic location of Grenada. Retrieved from http://www.seaaroundus.org/doc/publications/wp/2015/Mohammed-and-Lindop-Grenada.pdf

3.7.1 Blue economy Strategic development

In 2016, the island of Grenada was a founder member country of the Organization of Eastern Caribbean States (OECS) to establish a vision for the protection of its ocean space and provide the way forward for the blue growth (World Bank, 2018). A core element of Grenada's Blue Vision is the development of an Integrated Coastal Zone Management Policy (ICZMP). This provides a pathway for the sustainable development of its coastal area by establishing guidelines and policy instruments that could guide the community, ocean resources users, and the construction projects (ICZMP 2015).

The main aim of this Integrated Coastal Zone Management Policy was to ensure job creation opportunities, improve the ways of living of the society, enhance economic growth, while conserving the marine ecosystems. This approach has influenced several neighbouring island states to move in this direction (World Bank, 2018). The policy provides guidance and strategies for environmental preservation, livelihood improvement, and accountability with focus on priority areas including dealing with climate change resilience in Grenada (CARICOM Regional Workshop, 2019). The policy focuses mostly on the coastal areas of Grenada, and involves: coastal tourism, recreational activities alongside the coastline, and industrial parks (ICZMP, 2015). However, several concerns have been raised to whether Grenada had involved its people and other key stakeholders in the development of this strategic policy. As most of the proposed project would most likely put pressure on the islands' coastal area, where most of the people live and works (Leotaud, 2017).

The core components of the Integrated Coastal Zone Management Policy are as follows:

1) Good governance which promotes transparency and accountability.

2) Sustainability which promotes environmental awareness and community stewardship

3) Equity which promotes fairness in public decision making processes (ICZMP, 2015).

3.7.2 Stakeholders challenges in the implementation in the Integrated Coastal Zone Management Policy.

Grenada's ICZMP approach takes a multi-sectoral approach, which is quite inclusive with the active participation of several governmental entities, intending to manage the coastal zone and consider economic growth, social benefits and ecological conservation (ICZMP, 2015). This includes the participation of the Fisheries sector, the Ministry of Environment and Forestry, the Marine Protected Areas project coordination unit, the National Parks System, and Planning Authority and the overarching National Strategic Plan for Grenada (World Bank, 2018).

However, the main challenges being encountered by the stakeholders' are the low availability of data, which could have facilitated the understanding of the effect of the ocean on the country's economy, and impacts on a data driven policy development and decision making processes (CARICOM Regional Workshop, 2019). There is no specific definition for the Blue Economy, leading to difficulties in the business registration and official statistics for related record-keeping purposes (World Bank, 2018). There is also a lack of coordinating mechanisms that could have facilitated the policy's integration into national programs and policies. Further, the country is experiencing a lack of skills and specialised capacity to implement the policy (CARICOM Regional Workshop, 2019). Additionally, there is institutional fragmentation in regards to the allocation of responsibility among the stakeholders. Moreover, regarding the coastal environment, there is a lack of scientific research that could be used to inform policy and decision-makers for the implementation of the ICZMP (World Bank, 2018).

3.8 Findings from the case study of Solomon Island and Grenada.

This section aims to address the research question number 4. In general, the findings from these two islands states, have shown some similarities and as well as some remarkable differences in some areas which can be used to address the objective of the study. However, to effectively examine and compare the stakeholders' challenges being encountered for the implementation of the Blue Economy strategy, there is a necessity to understand the Blue Economy strategies of both states.

3.8.1 Blue Economy Strategic development of the two states:

The two states under consideration have both taken steps towards the establishment of strategic policy frameworks for the implementation of Blue Economy programs. Their frameworks have been initiated and, of particular note, been narrowed down based on their particularissues, needs and concerns and as per their ecosystem and socio-economic priorities. This provide their frameworks with different title names based upon their scope of actions being addressed.

In the case for Solomon Island, their "Integrated Ocean Governance" framework, has five priority aspects, which focus on MSP, Ocean Policy, legal framework, Capacity development to support IOG, and Sustainable financing, also to support IOG as its priority. This has been narrowed and prioritised in such a way to probably address their issues and needs such as clarification and management of ocean space, outdated legislations and lack of necessary skill to address their national development (UN, 2018).

For Grenada, the framework is named as an "Integrated Coastal Zone Management Policy for Grenada, Carriacou and Petite Martinique". This framework focuses on coastal management, with the objective of preserving and enhancing coastal ecosystems and the services they provide, while enabling social and economic development. This has been narrowed to probably address their national issues and needs such as climate change, high rate of poverty and low employment opportunities (ICZMP, 2015).

3.8.2 Stakeholders' challenges in the implementation of the Blue Economy strategy by the two states

Both Grenada and the Solomon Islands have adopted a multi-sectoral approach towards the development of their Blue Economy initiatives. This involves diverse stakeholders with interest towards the Blue Economy, such as actors from the private sector, civil society and, community, groups, non-governmental organisations (NGOs), and significant parts of the public sector. However, the public sector has been seen to be the main driver for Blue Economy policies within both states. For example, Solomon Islands has 12 government ministries involved in Blue Economy issues. Similarly, while the number of leading ministries from Grenada is not stated, they include the Fisheries, Forestry, Environment sector, the Marine Protected Areas Programme, the National Parks System, and Physical Development Plans and the overarching National Strategic Plan for Grenada, among others.

The common challenges being encountered by the stakeholders from Grenada and Solomon Islands are mainly the poor integration of policies which affects both vertical and horizontal cooperation between the stakeholders and which results in difficulties to address sectoral plans and projects. Additionally, both states are facing limited specialised capacity for the implementation of Blue Economy implementation as well as constraints both financially and in terms of human resources.

On the other hand, there are some differences in the types of challenges identified from the two states. In the case of the Solomon Islands, they are experiencing challenges in the management of their ocean space, and probably this is why they are emphasizing on the implementation of MSP as a major priority. Consequently, the Solomon Islands is facing legal challenges, particularly in terms of the integration of legal frameworks with informal ones. This likely explains the focus on the development of legal and policy as part of the strategic framework for the Solomon Islands. One unexpected challenge from Solomon Islands is that the competing day-to-day operation of government organisations is being affected by the many meeting and overseas conferences that government staff are involved in which appears to detract from Blue

Economy implementation efforts. This is unexpected, as one usually hears about this problem, but only rarely sees it highlighted in the literature, at least from this researcher's perspective, although it is an issue that is directly connected to limited human capacity within small island state governments. In contrary Grenada, has been experiencing issues in relation to the availability of data and this has been affecting high level decision-making leading to negative impacts on the national economy. Grenada has also been experiencing difficulty classifying Blue Economy oriented data and statistics for economic analysis, something that can be traced to the evolving and inconsistent definition of the Blue Economy itself. The state is also being affected by limited scientific research on various aspects of coastal dynamics and characteristics to inform decision making.

3.9 Lesson learnt for the effective implementation of Blue Economy the strategic policy of Seychelles:

Though Seychelles had been able to establish its Department of the Blue Economy while the two states discussion above have not done so, still there are lessons to be learnt from their experience. Indeed, as the Blue Economy is a new and evolving development, therefore it is well suited to comparative study (Commonwealth Secretariat, 2016).

In regard to the strategies adopted, the Solomon Islands and Grenada have initiated strategic frameworks that have been narrowed to address national priorities, needs and issues. Since Seychelles has a broad and complex strategic framework, these are arguably essential elements that Seychelles should consider in the implementation of the Blue Economy strategy. A narrowing of Seychelles Blue Economy strategy to address stakeholders and national priorities, needs and issues, would necessarily require the active participation of key stakeholders. Such an approach would likely influence their behaviour and lead to more active involvement in the development and implementation of Blue Economy initiatives and the national Blue Economy strategy in particular (Martin, 2010). A further advantage this context would be the

prioritisation of key actions to overcome their challenges experienced by key stakeholders expeditiously.

In terms of the common challenges being faced by Solomon Island and Grenada. It can be observed that Seychelles is not being spared from analogous challenges. These include limitations or lack of resources, poor integration of policies which affect vertical and horizontal cooperation between the stakeholders, and capacity issues concerning specialised skills for addressing sectoral plans and projects (see Appendix 1). These are common challenges affecting not only the mentioned three island states but the national development of many small island developing states generally, as identified by Commonwealth Secretariat (Commonwealth Secretariat, 2016). This being the case, an important consideration for Seychelles is to invest further efforts towards identifying and establishing good bilateral or multilateral cooperate networks with other developing island states that are managing these issues effectively, and consider the adoption and customization of these measures locally.

In reference to the differences in issues being faced by the two island being compared. This shows that though these small island developing state have several commonalities, each of them are unique in several ways, particularly in terms of traditions, culture, capacity, heritage, population. Accordingly, they will inevitably experience differences in the challenges being faced (World Bank Group, 2017). Consequently, Seychelles should recognise its uniqueness and anticipate that it will encounter issues that are uncommon amongst other states. Seychelles should therefore embrace its distinctive character and seek for innovative ways to develop creative skills to address and overcome its particular challenges. These ways and skills are crucially important especially when implementing projects in relation to the Blue Economy development which is new in its self.

Chapter 4

Analysis and Discussions.

4.0 Analysis and Discussion of the findings and results.

This chapter provides an analysis and discussion of the results presented in Appendix 1. The discussion in this Chapter has been categorised in such a way that they link and address each research questions and it makes reference to the case study and literatures review.

4.1 Discussion on Key Stakeholders' challenges identified for the implementation of the Road Map.

This phase of discussion is based on the responses made to the first research question, (see Appendix 1 and Results for first research question). The most common key stakeholders' challenge identified was, operating in weak inter-ministerial collaborative environment. It can be observed that this implementation challenge is analogous to that faced by Grenada and Solomon Islands (see Chapter 3). This weakness generates competing priorities amongst the stakeholders and further affects the effective coordination of the Strategic Policy as stated by respondent 3.

With the aim of enhancing inter-ministerial collaboration, The Department of the Blue Economy of Seychelles, undertook a strategic alignment exercise in 2019. The objective of this exercise was to prioritise and harmonise the key actions from the Road Map amongst the key stakeholders. The alignment exercise successfully harmonised and prioritised 115 key actions down to 55 mutually agreed key actions with the participation of all the key stakeholders. However, the results from the respondents

clearly indicates that most of them still do not feel like they are operating in a harmonised or collaborative environment. This is arguably due to the lack of a validation phase – something that was omitted during the previous strategic exercise, as well as a lack of an operational plan which has not yet been established as stated in (see Chapter 1.5).

This explains the reason why many respondents placed emphasis on the lack of an integrated operational plan as a problematic issue or challenge for implementation. As discussed in chapter 1.3, the Road Map articulates four strategic priorities, seven principles and the vision for the Blue Economy development of Seychelles, but does not indicate the allocation of responsibilities, and time frame for implementation purposes. This has resulted in a lack of clarity as to how, what, who and when actions are to be undertaken by the key stakeholders, and again as a negative feedback, reinforces the perception and reality of a weak inter-ministerial collaborative environment (Martin, 2010).

Lack of required resources is a further common issue affecting most if not all public institutions at present in Seychelles and other small island States such as in Grenada (World Bank Group, 2017). There is also an issue of legal limitations which again is similar challenge to that experienced in the Solomon Islands and Seychelles (see Chapter 3). In particular, some of the projects being proposed such as, employment programs and provision of basic utilities to investors, are facing a lack of legal support. Additionally, the legal development process is extremely slow, thus leading to delays in the implementation phase of the Blue Economy strategies as stated by respondent 12.

Poor stakeholders' involvement is another common challenge encountered by these key stakeholders. Though there are four strategic priorities in the Road Map, practically, focus is mainly being placed on economic diversification opportunities and environmental conservation (see Chapter 1.2). As a result, stakeholders' involved in social development sectors such as education and health, feel that they are not recognised in the policy development process and that their participation in the Blue

Economy implementation is insufficient or under-appreciated, as emphasised on by respondent 7. This raises concerns over the depth of stakeholders' consultation program conducted throughout the policy development phase.

The point raised by respondent 9, in reference to the lack of private sector involvement is interesting since the Road Map, promotes and indeed prioritises economic diversification and investment opportunities. However, it is of note that the Road Map has been designed in such a way that key actions are allocated to government entities as key implementers, rather than to private sector actors (see Chapter 1.3).

One unexpected response, uncommon amongst the others, was that there was a lack of political and leadership support for the Blue Economy Strategic Policy, though this view was expressed by only one key stakeholder. This view was unexpected, as the President and Vice President of Seychelles have placed substantial emphasis on Blue Economy development and even positioned the Department of the Blue Economy in the office of the Vice-President showing the support of the government and the ruling political party towards such development (see Chapter 1). However, since only one respondent expressed such, this links to the previously stated issue, that emphasis is being placed mostly on the aspects of investment and environmental preservation thus neglecting other social inclusive key actions relating to education and health. This is arguably the reason only respondent 9 felt a lack political support towards its Blue Economy- oriented project as it is not captured in the current political and leadership as a priority.

The respondents provided clear information on the stakeholder's challenges being encountered. However, one issue that had not been stated by the respondents is the broadness approach being applied by the Blue Economy Strategic Policy itself, which can also be considered as a key stakeholders' challenge as well (Martin, 2010). It is of note that in contrast to Seychelles, Grenada and Solomon Island are applying a narrowed strategy but yet experiencing several challenges (see Chapter 3). Therefore, it can be stated that the application of this broad strategy by Seychelles is a contributing factor to the challenges being faced by the key stakeholders.

4.2 Impact of these challenges on key stakeholders and impacts on the implementation of the Blue Economy

This section discusses the results for the second research question, (see Appendix and Results for second research question). A common impact being faced by most of the key stakeholders is the high occurrence of delayed projects. For example, respondent 6 stated that they have limited guidance, which hampers them in the implementation their projects, notably in employment generation and legal development initiatives. There is a strong suggestion that this is a consequence of the lack of an operational plan, an assertion backed by the fact that this problem highlighted by many stakeholders (see Appendix 1 and Results for first research question). Additionally, this view is supported by the fact that the Blue Economy is a new development with an unclear definition (Silver et al., 2015), which provides imprecise guidance in its scope of development and this affects project implementation. For example, many stakeholders are having issues in successfully obtaining grants and loans from donors as their project proposals are found to be not Blue Economy oriented. This delay their projects, as stated by respondents 6 and 12.

Very few respondents expressed concerns about the following impacts: an increase in duplicated functions, pending issues, poor legal power and missed opportunities. For instance, in the case of the increase in duplicated functions, this was raised by only two respondents. Specifically, respondent 1 stated that several ministries are addressing the same issue at the same time and thus creating a frustrating operational environment, a view shared and stressed by respondent 6.

It has been noted that some impacts are common amongst most stakeholders while some are experiencing their own specific and distinct types of impacts. These issues are probably being influenced by the way the stakeholders' interests are categorised and prioritized which exposes their functions to certain similar challenges and impacts (Stanley, 2017). For instance, Respondent 2, 5, 6, and 7, are operating within the same scope of interests, which focuses on enhancing Blue Economy investment projects,

and therefore facing the similar challenges and impacts (see table 1) such as lack of resources which delays the implementation of port expansion project.

As seen from the literature review, institutional integration is a core component that supports the effective integration of the ecological, economic and social sustainability elements of Blue Economy development (Johannes, 2002). From the results provided by the respondents, the component of institutional integration of the stakeholders, is the main component being impacted by these challenges, such as poor legal power and duplicated functions. This issue could further affect the effective integration of ecological, economical, and social sustainability of the Blue Economy development. It can also be added that these impacts can be linked with the fact that there is no integrated operational plan (see appendix 1, response for research question 1). The absence of such a plan is viewed as leading to issues in institutional functions and operations (Gorski, 2009), specifically in project development, missed opportunities and duplicated functions. This is quite similar to the case of Grenada and Solomon island whereby it has been noted that poor integration of policies is affecting cooperation between and function of stakeholders, in addressing sectoral plans and projects as stated in chapter 3.

4.3 Causes of these challenges.

This section provides a discussion for the data obtained for the third research question, (see Appendix 1 and Results for third research question). Most of the respondents stated that there is a lack of what can be termed the 'sensitization' of Blue Economy strategy and development. That is, there is limited understanding and awareness of the meaning of Blue Economy concepts, plans and strategies at the practical level among key stakeholders. As respondent 2 stated that there is lack of awareness and understanding of the Blue Economy development and importance of the Road Map and such demotivates the participation and cooperation of key stakeholders in the implementation of the Road Map. This might result in poor stakeholders' involvement at the local level (see Appendix 1, response for research question 1). Seychelles has been playing a key role in promoting and advocating the importance of the Blue

Economy within the region (Agripine et al, 2014). Arguably as a result of this emphasis, less attention has been given to the local key stakeholders, and this is probably why they feel, as it were, 'left out' of the Blue Economy conversation and process. Thus unaware on the importance of the implementation of the Blue Economy Road Map as stated by respondent 2.

It is notable that very few stakeholders indicated the following issues as the underlying causes of challenges experienced: isolation and the operation of silos, lack of data, research and innovation, and lack of specialised training opportunities as causes to the above stated challenges. To be precise, it can be seen to be peculiar, that very few respondents have drawn attention to the occurrence of isolation and the operation of 'silo' approaches as causes for the challenges being faced, while at the same time many have stated that there is a weak level of inter-ministerial collaboration within such development (see appendix 1, response for research question 1). One potential explanation for this is that, though they may well be facing such challenges, most of them are used to operating in an isolated manner and within a silo-oriented operating culture and do not recognise such issues as a source to any challenge being encountered (Ceccarelli, 2018). Nevertheless, it can be noted that isolated operations can worsen the availability of resources. For example, respondent 10 highlighted the problem of where planning is done in isolation and tapping in the same limited basket of resources. Consequently, the lack of data, research and innovation can be identified as the main causes for the lack of integrated operational and monitoring and evaluation plan. The lack of crucial data and research can also delay effective decision making, proper evaluation and even the initiative of innovative projects (ECA, 2016).

One important thing learned from this section is that the lack of sensitization can trigger the rise of several challenges, such as poor stakeholders' involvement. This can lead to weak inter-ministerial cooperation and a lack of political support, as expressed by respondent 2. Therefore, it could be stated that the sensitization of the Blue Economy development and the Road Map to its key stakeholders, on a local as much as a regional basis is crucial. This has significant potential to influence behaviour

change and enhance the participation of key stakeholders in the early stage of the policy development (Pomeroy & Rivera-Guieb, 2005).

4.4 Solutions to stakeholders' challenges for the effective implementation of the Blue Economy Road Map.

This section discusses the data obtained for the potential solutions proposed by the key stakeholders in line to the fifth research question (see Appendix 1 and Results for the fifth research question). Most of the key stakeholders have proposed the establishment of an integrated operational plan, the performance of a stakeholders' analysis and a coordination mechanism. This shows that these stakeholders, certainly want to overcome these challenges faced and to implement the Strategic Policy. As respondent 3 emphasized that there is a need to identify the stakeholders and their level of interest in the Blue Economy implementation, as well as the need to develop an operational plan.

Of note, very few of the stakeholders stated the necessity for the deeper involvement of the Department of Public Administration (DPA), which is a public institution within the government of Seychelles that is responsible for the management of the Seychelles Public Service. This is an intriguing finding, as the Blue Economy is being spearheaded entirely by the public administration system as stated in chapter 1. Therefore, enhanced involvement by the DPA could, in theory, help in the simplification of institutional arrangement for the Blue Economy implementation (Ibrahim, 2018) which could further reduce the issue of inter-ministerial cooperation. In addition to that, respondent 1 even went so far as to propose the establishment of a Ministry for the Blue Economy instead of a Department, such as is being done in some states within the Indian Ocean. Nevertheless, it is national priorities and needs that determine the Blue Economy institutional arrangement of a particular state (World Bank Group, 2017).

The establishment of a resource mobilization strategy has also been proposed to address the issue of the ever-present challenge of limited availability of resources as proposed by respondent 3 and 5. Perhaps surprisingly only one respondent stated the

necessity to enhance research and innovation, when such has been known to be an essential component of the Blue Economy implementation of Seychelles (Republic of Seychelles, 2018). This is probably due to lack of interest and participation in this development at present as stated in chapter 1.3, which triggers for a lack of interest in research and innovation from the key stakeholders.

One interesting suggested initiative, was the proposal of a forum or committee for policy makers as suggest by respondent 2, to discuss on policy issues for the effective implementation of the Road Map. This would enhance interaction of the policy makers and can further propose simplified processes for policy development in Seychelles. (Buşmachiu, 2012).

In general, it can be stated, that the performance of a key stakeholders' analysis and mobilization of resources are essential for the effective implementation of the Road Map, to ensure that no key stakeholders are left behind. It has also been noted that the stakeholders do have innovative ideas to overcome these challenges such as through the initiative of forum for policy makers and stakeholders to enhance discussion on policy issues as stated by respondent 2. However, this depends on the establishment of a proper mechanism to coordinate these initiatives. Ultimately, respondent 4 stated that it is through a coordinated approach that successful implementation of Blue Economy initiatives are to be achieved. A key lesson learned from this consultative exercise is that enhanced attention should be given to a whole of Government approach as this can be regarded as a necessary condition for successful implementation of the Blue Economy of Seychelles (Commonwealth Secretariat, 2019).

Chapter 5

Recommendations and Conclusion

5.1 Recommendations for further actions

This section formulates the results and analysis into proposals for further action for the government and policy-making review purposes, to effectively overcome the key stakeholders' challenges for the effective implementation of the Blue Economy Strategic Policy of Seychelles. Drawing on the research and critical analysis of the survey conducted, the following potential actions are recommended:

- Review of the **strategic alignment exercise** which was conducted in 2019 in order to identify where to adjust and harmonise the key actions and responsibilities of stakeholders to accord with the current national interest. Subsequently, it is considered to be vital to conduct a **validation meeting** to confirm and enhance the legitimacy of this approach and to recognise and reinforce stakeholders' engagement in the implementation of these actions. It is suggested that this would enhance acceptance and facilitate the integration of the Road Map among the Key stakeholders and further influence their participation in the implementation process.

- Develop an **integrated operational plan**. This is an essential and presently absent element. This is so because such a plan would potentially provide vital strategic guidance, reduce the level of delayed projects, missed opportunities and enhance inter-ministerial cooperation amongst the stakeholders. The

establishment of an operational plan would also detail and clarify the aspects of responsibilities to the key stakeholders and leading to further enhancement their level participation and involvement.

- **Simplify the legal development process**, as this would facilitate the review of legal issues to specific pertinent issues. The establishment of an efficient legal development process would facilitate the provision of legal instrument to address current and existing issues on a timely basis. In addition, this would provide operational power to the key stakeholders in addressing pertinent issues. It is acknowledged, however, that delivering on this particular recommendation is especially challenging given the systematic impediments and challenges associated with changes in legal as well as political institutions and procedures.

- **Involve the DPA** (Department of Public Administration) as a key stakeholder to help to simplify institutional and operational arrangements associated with implementation of Blue Economy strategy. This would amplify institutional integration as a core component within integrated whole-of-government approach to ocean sustainable development and the Blue Economy development. As the responsible government agency, the DPA has a potentially pivotal role to play in building strong and effective institutional arrangements and could assist in strengthening cooperation within diverse entities and provide efficient administrative support to the key stakeholders during the implementation process of the Road Map.

- **Widen the spectrum of key stakeholders** beyond government institutions through the establishment of mechanism that would influence the active participation of private sectors, civil society and the scientists.

- **Enhance resource mobilization strategies** to attract financial support for scientific research and the recruitment of specialised skills to address specific issues and action in the Blue Economy implementation process. The

establishment of such strategies could reduce the pressure on the government budget and financial resources.

- Establish an innovative and creative **incubation hub** that can be used to address the unique and complex component of the Blue Economy development. These innovative and creative incubation platforms can be used to inform the government on the best practice and ideal approach towards the implementation of the Blue Economy.

- Establish a **data and information storage** institution, where scientific data can be stored, managed. These would facilitate the easy access to data and information by policy analysts and decision-makers, which could drive evidence-based policy discussion and decision making during the implementation of the Blue Economy.

- Establish **international cooperation** and networking with other small island developing states on a bilateral or multilateral basis, to share experience and expertise in addressing common island states-oriented issues, to help to inform the effective implementation of the Road Map. This can foster opportunities for further learning and knowledge exchange, where the country can acquire a deeper understanding on common issues being faced similar states and how to undertake potential solutions.

- **Narrow down the Blue Economy Strategic Policy** such that it can better address national priority, needs and issues according the local available resources and capacity.

- Enhance Blue Economy **sensitization** program on a local basis to engage and help to increase the active participation of all key stakeholders and thus greater acceptance and enhance legitimacy for the Blue Economy strategy and related initiatives.

5.2   Concluding Remarks

To sum up and conclude this study, it is essential to understand the vital role that the ocean plays to humanity as a source of goods and services through the provision of food, energy, and medicines, which are crucial for human life on Earth. Many humans are becoming aware that these goods and services are not endless but could reach an end if not used sustainably. These perceptions enhanced the green economy's approach to the Blue Economy as a pathway to the sustainable development of the ocean.

This is especially so for Seychelles, which introduced the Blue Economy development as a part of its national agenda in 2012. The idea of such an initiative was influenced by the fact that Seychelles being a small island state of land area of only 455 km^2, is also a big oceanic state with an EEZ of 1.4 million km^2, and consisting of 115 islands. The huge oceanic space of Seychelles relative to its area of land territory is the main source of contribution to the socio-economic development of Seychelles. The two main pillars of the Seychelles economy are clearly derived from two ocean-oriented sectors, the coastal tourism and fisheries sectors, of which tourism provides 50 percent fisheries contribute up to 30 percent and of national GDP to the economy and further provides investment and employment opportunities to the people of Seychelles.

In recognition that its maritime jurisdiction needs to be clarified so that it can enjoy full benefits from Blue Economy developments within it, Seychelles has settled delimited maritime boundaries with Tanzania, France (Reunion), Mauritius and Tanzania. Additionally, Seychelles and Mauritius have a joint management agreement for the continental shelf of the Mascarenes Plateau. It has also confirmed its sovereign rights over the northern extended continental shelf.

These are activities and developments that in Seychelles that have been strongly influenced by its broad and productive ocean spaces, and therefore elevate the importance of the sustainable development of the ocean as a priority agenda to the country. This, in turn, has encouraged the government towards the establishment of

the Department of the Blue Economy and implementation of the Blue Economy Strategic Policy (Road Map).

Since these developments and the implementation of its Road Map require intensive involvement of key stakeholders within Seychelles' government. It was noted then, following a survey which was conducted in 2019, that these key stakeholders are facing a considerable number of challenges that are hindering their active participation in the Blue Economy development. If such is not dealt with the soonest, it might affect the implementation of the Road Map.

These underline the present study's necessity, which had set out the overarching objective, which is to examine the nature of the challenges faced by key stakeholders and chart ways to overcome them to help realize blue economic growth for Seychelles. This was articulated in further detail through the following five sub- objectives:

1. To determine the type of challenges being encountered by the key stakeholders in implementing the Blue Economy Strategic Policy and Road Map (2018-2030), in Seychelles.

2. To define the impact of these challenges on the Key implementers and on the implementation of the Blue Economy.

3. To determine the causes of these challenges.

4. To compare stakeholders' challenges in the implementation of Blue Economy strategy between two small island development states, to help to realize blue economic growth for the Seychelles. To obtain potential options for corrective actions for these challenges in Seychelles.

5. To explore and propose potential options for corrective actions for these challenges in Seychelles.

The study set up open ended questionnaires and they were distributed to the 24 key stakeholders. There were a total of 19 key stakeholders who responded to the study which provided a strong response rate of 79 percent.

Lessons learned from these respondents are that these stakeholders face several types of challenges, for example, weak inter-ministerial corporation, lack of resources, poor coordination, and lack of specialized capacity. These challenges are mainly institutional-oriented issues that are impacting on the service delivery and function of their organization. For example, delaying project implementation and having duplicated functions affect the implementation of the Blue Economic strategy policy as a whole.

The respondents have suggested some causes of these challenges. However, most of them emphasize on the lack of sensitization to the Blue Economy approach on a local basis. This has led to a lack of participation from the stakeholders. Intriguingly, very few respondents expressed the need to establish a Ministry for the Blue Economy instead of a Department to address the challenges being faced by the key stakeholders, when this could foster leadership and political influence towards the development. However, a key finding was that there is an urgent need to develop an integrated operational plan and this is widely supported by the key stakeholders. So, though the Blue Economy development is an ocean-oriented development, great attention should be put on its land-oriented, through governmental functions and its institutional integration as a core component in the implementation of the Blue Economy Strategic Policy, as this where the leadership dwells and key actions originated, in Seychelles.

To acquire a deeper understanding of the challenges being faced by key stakeholders in the implementation of the Blue Economy in order to inform Seychelles regarding the potential solutions and to realise the Blue Economy implementation. The researcher conducted a comparative case study on two other small island developing states. These were the Solomon Islands from the Pacific Ocean and Grenada from the Atlantic, in order to examine and compare their stakeholders' challenges being faced in the implementation of their Blue Economy Strategic Policy.

The lessons learnt from the case studies were that there are several commonalities or similarities in the types of challenges being faced by small developing islands from other regions such as, lack of resources in terms of financial and human resources, and

poor policy integration. They are facing limited specialised capacity, as well. Since Seychelles is facing similar issues, the country should consider the enhancement of international and bilateral relationship small island developing state, so that it can acquire deeper knowledge on how to effectively address issues of common interests and the do's and do not's while realising its strategic implementation program.

On the contrary, it has been noticed that these states are facing different and dissimilar issues from each other. This shows that Seychelles should consider its uniqueness as a small developing sate, and should try to cultivate a creative and innovative culture within its workforce to address many of its issues as similar states do not have answers for everything.

The main limitations encountered throughout the study is the unavailability of literatures addressing Blue Economy strategic development, specifically on the potential solutions for the challenges being faced by key stakeholders. This led to the realisation that this study required consultation with stakeholders in Seychelles. It has now been understood that this development is new and it is now that most studies on this topic are being undertaken.

On another note, the study encountered some limitations in reference to the number of response from the participants. While a 79 percent response rate from the key stakeholders can be considered to be strong, nonetheless it is not comprehensive. Some stakeholders did not consider it necessary to participate and contribute to the survey. Also, since the key stakeholders are mainly from the public sector, the study has missed out essential inputs from the private sector and civil society. Had obtained a higher percentage of response and inputs from other sectors for the study, probably arguably the results and findings would have been different.

The findings and lessons learned from this study proposed the following recommendations as to the way forward and potential solution towards the key stakeholder's challenges being faced for the implementation of the Blue Economy of Seychelles. In particular, there is a need to review the strategic alignment exercise conducted in 2019. Then conduct a validation meeting to confirm and enhance

stakeholders' involvement in the implementation of these actions. The government should develop an intergraded operational plan. Consideration should be placed on the simplification of the legal development process. The government should also seek to include the Department of Public Administration as a key stakeholder, in particular to help simplify the institutional integration amongst the key stakeholders. Focus should also be placed on resource mobilisation strategy to attract financial to address specific issues and action in the Blue Economy implementation process. Emphasis should also be placed on establishing an innovative and creative incubation platform that can be used to address the unique and complex component of the Blue Economic development.

The establishment of a data and information storage institution, where scientific data can be stored and managed would also be beneficial. Further, the government should seek to establish and deepen bilateral or multilateral cooperation with other small island developing states to share experience and expertise in addressing common island states oriented issues.

Consideration should also be given to streamlining and narrowing down the Blue Economy Strategic Policy to address national priority, needs, and issues according to the locally available resources and capacity

Challenges that could be encountered by the government while implementing these recommendations are the poor support of the private sectors and the civil society. This is because they are not included as part of the key stakeholders, and they might create certain resistance in areas where the assistance might be required. In this case, the government should consider the widening of key stakeholders network and consider the establishment of a coordinating mechanism which would influence the active participation of the private sector and civil society.

The study is not only exhaustive because it did not capture all key stakeholders but it also did not cover interested stakeholders from outside government and these create avenue for further research. Such as to explore the challenges being faced by the private sector and civil society in implementing the Blue Economy in Seychelles. This

research would fill the knowledge gap of this study and provide the government with evidence based information of policy and decision making purposes, in the effective implementation of the Road Map.

Finally, it is clear that Seychelles has boldly embarked on a voyage towards a blue economic future, building on the beauty of its islands, rich maritime heritage and vast maritime jurisdiction. However, it is clear that this voyage is through only partly surveyed waters and manifest as well as complex challenges have arisen along the way towards the destination of the Blue Economy Strategic Policy for Seychelles. It is hoped that this study assists to some extent in identifying these challenges as well as appropriate policy-oriented options for their successful resolution.

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Appendix 1

Findings and Results from the open ended questionnaire

The results are presented and categorised in such a way that they answer and link to the research questions. The results provide the themes which have been classified from the gathered data and considers the number of respondents agreeing on the same theme for discussion and analysis purposes.

Response

The questionnaires were distributed and collected through email facilities, and three reminders were forwarded to slow respondents. They were distributed to 24 policy representatives, each representing one of the 24 key stakeholders of the Blue Economy development within the government of Seychelles, as explained in chapter 1. The study obtained 19 responses out of 24 participants, which shows a response rate of 79 percent.

Many of the policy representatives who responded to the study hold the high rank of post title and policy-oriented responsibilities, such as Principal Secretaries, Chief Executive Officers, Director Generals and Senior Policy Analysts. This provided credibility to the source of data provided since strategic development are coordinated by high officials in Seychelles.

1) **Results for first research question:**

To identify stakeholders' challenges for the effective implementation of the Road Map, the respondents identified some essential issues in the implementation process. The challenges identified are classified into the following themes; Weak inter-ministerial collaboration, poor stakeholders' involvement, no integrated operational plan &

monitoring & evaluation framework, legal limitation, lack of required resources, and lack of political will.

- **Theme: Weak inter-ministerial collaboration**
- **Number of respondents: 12**

Respondents 3, 4, 5, 7, and 16 stated and agreed on the same issue: competing priorities between the government entities, which affects proper discussion and negotiation of priorities among each other. It has been further expressed by respondent 3 that the main issue being encountered is the lack of strategic coordination between the Department of Blue Economy and the other key stakeholders. Respondents 1, 2, 8, and 10 made it clear and agreed on the that there is a weak inter-ministerial collaboration amongst key stakeholders that hinders their involvement in the implementation of the policy. Such concern has also been addressed by respondents 9, 17, and 18, expressing that their main issue is that there is a lack of synergy between the government institutions then creating a barrier for the implementation of Blue Economy activities.

- **Theme: Poor stakeholders' involvement**
- **Number of respondents: 9**

Respondents 2, 5, and 8 stated and agreed that they are being affected by the same issue. That is the lack of commitment by the key stakeholders and implementers, thus not fully committed towards the implementation of the key actions. There was also concerns on the same issue, which was addressed as; the insufficient involvement of key stakeholders in the provision of support towards the Blue Economy initiative, by respondent 6 and 9. Some stakeholders, such as respondents 7, 15, and 16, stated that some essential public institutions are being left out in the Blue Economy development process. Thus their contributions are missed out in the implementation processes. It has been noted that respondent 9, made much emphasis that the private sector should have been included as a key stakeholder in the implementation of the Road Map since it puts a lot of emphasis on investment opportunities in the Blue Economy development.

- **Theme: No integrated operational plan**

- **No of Respondents: 9**

The absence of an integrated operational plan has also been noted as a barrier for the key stakeholders. Respondent 1, 4, and 5, expressed on the same issue, that the Road Map does not provide the required action, resources, and allocation of responsibilities to support the implementation of the Road Map. To stress on what was agreed by respondents 1, 4, and 5, it was stated by respondent 12 that the responsibilities are not clear. They are currently trying to figure out who should be doing what and when. Other stakeholders, such as respondent 6, stated that there is no specific guidance on how to act on specific issues of the Blue Economy that an entity should address. There was also an issue of poor clarity in the key action, stated by respondents 13 and 17, whereby the action and guidance are not explicit.

Again in reference to the absence of an operational plan, respondents 3, 9, and 19 stated that the absence of key performance indicators would affect the implementation of the Road Map, as the actions would not be easily measured.

- **Theme: Legal limitation**

- **No of Respondents: 4**

Though few respondents stated their concern on the legal issues, the findings on such were quite interesting as it addresses the tools that can be used to implement the Road Map. As respondents 5 and 13, expressed their views on the lack of legal framework to support the policy actions to be implemented. Further, respondents 12 and 8 expressed their disappointments towards the long development process and duration taken for legal enactment, which makes the legal frameworks inefficient and affects the implementation of employment programs and the provision of facilities to private sectors.

- **Theme: Lack of required resources**

- **No of Respondents: 8**

Limited availability of resources has also been an issue affecting the key stakeholders in the implementation of the Road Map. As specified by respondents 3, 16, and 19, limited resources in terms of both human and financial have been a barrier to the delivery of actions in the development of the Blue Economy. Respondent 1 agreed on the same but made further emphasis on the lack of financial resources, which makes it uneasy for the recruitment of potential staff, and that as well leads to a lack of human resources. As for respondents 4, 6, 13, and 18, they all made an emphasis on the issue of staff turnover, that cannot be easily resolved due to the inability to remunerate staff satisfactorily.

- **Theme: Lack of political will**

- **No of Respondents: 1**

Only one respondent showed concern on the issue of lack of political will. Whereby the main concern of respondent 9 was that the Politicians are not interested in the development of the Blue Economy and do not support the initiative of the innovative project within such development.

2) **Results for second research question:**

This section provides the results to research question 2. It addresses the impacts affecting the key stakeholder in reference to the challenges being encountered. The themes are classified into the following; delayed projects, duplicated functions, lack of attention to pertinent issues, lack of legal power, and missed opportunities.

- **Theme: Delayed projects**

- **No of respondents: 11**

Many stakeholders have felt that the organisation is being affected in such a way that it affects their project performance processes. Respondents 6 and 12 stated that the unclear nature of the Blue Economy provides limited guidance on the Blue Economy, which affects them from implementing their sectoral projects, as most of the project proposals are found to be not Blue Economy related. In the same line, respondent 5 stated that no action plan limits them from making policy and legal intervention that could have contributed enormously to employment and investment projects in the Blue Economy development. Due to a lack of resources, approved projects are being implemented very slowly and actually behind the required time frame as stated by respondent 2, 7, 10, 12, 15, and 17. Emphasis was also placed by respondents 8, 9, and 11 on the issue that essential projects such as port expansion, creativity and innovation hub, cruise tourism, and yacht industry are being affected and still pending. These are due to the fact that there is no proper coordination amongst the respective sector, and therefore affect the development of these projects.

- **Theme: Duplicated functions**

- **Number of respondents: 2**

Respondent 1 made many emphases that the organisation is being affected by several duplicated tasks. Whereby one task is being delegated to more than one organisation and thus creating organisational conflicts and affecting the service delivery of the organisation. Same has been stated by respondent 6, which express the disappoint on how the organisation is being affected. when directives are being given from respective minister to address and revisit a particular issue twice and at times more, which have already been addressed by an another organisation.

- **Theme: Pending pertinent issues**

- **Number of respondent: 2**

Addressing pertinent issues has been seen to be a challenge in the development of the Blue Economy of Seychelles. As respondent 13 expressed how bitter they are since it takes several periods of time before a problem can be attended to and a solution be identified to address policy issues. Respondent 5, stated the same concern, but elaborated on such by saying that the issues are not just being dragged, but they are also piling and stocking up, which is somehow affecting the service delivery towards their customer.

- **Theme: Poor legal power**
- **Number of respondent: 2**

Concerns have also been raised on the aspect of legal power for the key stakeholders. As respondent 2 stated, there is inadequate enforcement power of existing laws to support policy actions and, therefore, affect the organisation's performance. Respondent 12 provided the same input but made an emphasis on the existence of a slow legal process to deliver legal support by the organisation for the implementation of the Road Map.

- **Theme: Missed opportunities**

- **Number of respondent: 2**

As stated in chapter 1, the Blue Economy offers several investment and employment opportunities for the population. Going through issues in reference to lack of operational create missed opportunities for the organisation to address common issues and key actions, as stated by Respondent 7. In addition, respondent 6 stated that Key

stakeholders are not offered involvement opportunities throughout the implementation phase.

3) Results for third research question:

This section will present the result from question number 3. It examines the causes of stakeholders' challenge for the effective implementation of the Blue Economy Road Map. The themes identified for the classification of data are; isolation and silo operation, lack of data, research and innovation, lack of sensitization, and lack of specialised training opportunities.

- **Theme: Isolation and Silo operation**

- **Number of respondents: 3**

Isolation and silo operation by the public institutions have been seen as sources for these challenges and issues being encountered by key stakeholders. Respondent 7 describes such operation as the insufficient cross-organisational interaction between the public institutions, which further leads to the rise of several issues such as poor planning processes. Respondent 10 stated that silo operation causes limited resources as all agencies are planning in isolation and later tapping in the same limited resource basket. Further, respondent 16 agreed to the statement of respondent 7 and 10 and expressed that silo operation has been intensely cultivated in the government's traditional operation and could be one of the leading cause of several issues being faced stakeholders.

- **Theme: Lack of data, research, and innovation**

- **Number of respondents: 3**

Lack of data, research, and innovation have been noted as the sources for the occurrence of the challenges being faced by these stakeholders. Respondent 3 stated that there is a lack of research in all aspects of the Blue Economy development of Seychelles, which hinders the development of evidence-based public policies. Respondents 5 and 8 provided a similar opinion and stated that lack of research creates the inability to initiate innovative policy actions/solutions.

- **Themes: Lack of sensitization programs**

- **Number of respondents: 10**

Many respondents have stated that the lack of sensitization program causes the rise of challenges amongst the stakeholders. Respondents 1, 5, 6, 7, 13, 14, and 19 made much emphasis that lack of awareness and understanding of the blue economy development has been affecting the active participation of their organisation in the implementation of the Road Map. Respondents 8 and 3, expressed their disappointment that sensitization of the Blue Economy development is being done on regional and international basis. Thus neglecting the local stakeholders, which again demotivates their participation in this program. Respondent 2 stated that entrepreneurs and investors are not aware of the Blue Economy initiative and the Road Map.

- **Themes: Lack of specialised training opportunities**

- **Number of respondents: 3**

Lack of specialised training opportunities is another source of issues affecting the Blue Economy implementation. Respondent 6 stated that this development is new, and there is no specific training program for such a development. Thus many do not know the way forward of such. The same opinion has been agreed upon by respondent 10, which stated that there are limited local experts in the Blue Economy-oriented field. Further

emphasis on such was expressed by respondent 2, which stated that there is a lack of specialised capacity building opportunities in the country.

4) Results for fifth research question:

This section will present the result from research question number 5. It examines the solution of stakeholders' challenge for the effective implementation of the Blue Economy Road Map. The themes identified for the classification of data are; Establishment of a coordination mechanism, simplify the legal framework development process, in-depth involvement of DPA public operation, development of operational plan and M&E, enhance resource mobilization strategy, incentives, forum for policy makers/interaction, enhance research and innovation, and conduct a stakeholders' analysis and engagement.

- **Themes: Establishment of a coordination mechanism.**

- **Number of respondents: 4**

The establishment of a coordination mechanism was one of the potential solutions proposed by the respondents. Respondent 5 suggested that a program can be established to foster coordination amongst the stakeholders. Respondent 18 stated that a mechanism, such as a committee, with the participation of representatives from each stakeholder, could be established. Such could be used to communicate and relay strategic information. There was also a suggestion from stakeholders 9 and 11, on the establishment of desk officers, from each key stakeholders' organisation to act focal person and represent the Blue Economy development and the Road Map implementation.

- **Theme: Simplification legal framework development process.**

- **Number of respondents: 2**

Respondent 2 stated that there is a need to review the legal development process. Respondent 12 stressed the necessity to simplify the legal framework, that it can be easily understood and interpreted by the stakeholders.

- **Themes: Provision of specialised training.**

- **Number of respondents: 3**

Due to lack of specialised training on the Blue Economy development. Respondent 4 suggested enhancing scientific research capacity through the University of Seychelles and other high-level educational institutions in the country. Respondent 8, further advised on the establishment of a mechanism that could attract experts in Blue Economy development to the country. In addition, respondent 6 suggested establishing good regional cooperation, which could facilitate the exchange of specialised experience on the Blue Economic development and implementation of the Road Map.

- **Theme: Establishment of a Ministry of Blue Economy**

- **Number of respondents: 2**

It has been suggested by respondent 1 that the government should consider the establishment of a Ministry of Blue Economy other than a department, as this is a similar approach taken by the Mauritius and Kenya. The respondent further added that the establishment of a Ministry would influence political support and facilitate the integration of key stakeholders. There was a further elaboration on the necessity for the Department of the Pubic Administration's in-depth involvement in such development since, as stated by respondent 13. This could facilitate the administrative intuitional operation of the government bodies in the implementation of the Road Map.

- **Theme: Development of an operational plan.**

- **Number of respondents: 5**

Respondent 3 proposed the need to develop an operational plan. Respondent 6 and 14 agreed with the need for an operational plan, but added that the plan should provide key indicators that could further be used to develop a monitoring and evaluation framework. Respondent 13, stated same but used the word strategic action plan instead of the operational, which is believed to be addressing the same point. Respondent 11 made emphasis on the same as well. However, describe such as the need to develop a sectoral plan that provides clear action, responsibilities and set clear time frame while acting on the provided activities.

- **Theme: Conduct a stakeholders' analysis and mapping.**

- **Number of respondents: 4**

The performance of stakeholders' analysis and mapping exercise has been noted as a potential solution. As respondent 7 suggested that there should be activities that promote more significant interaction among stakeholders. Respondent 3, made emphasis on the need to identify all stakeholders and their level of interest in the Blue Economy development. In addition, respondent 12 and 18 agreed with respondent 7 and 3, but both further suggested that there is a need to conduct a stakeholders' analysis, and determine their specific contribution in the implementation of the road.

- **Theme: Enhance resource mobilization strategy.**

- **Number of respondents: 3**

Respondent 3 proposed the establishment of a resource mobilization strategy for the gathering of funds to attract experts in the Blue Economy field. The same was agreed by respondent 5 but phrased so that resources should be mobilised to seek international

assistance and address specific action in the implementation phase of the Blue Economy.

- **Theme: Enhance research and innovation**
- **Number of respondents: 1**

Respondent 1 suggested that the government should invest in research and development for evidence-based strategic policy development.

- **Theme: Forum for policymakers and interaction.**
- **Number of respondents: 2**

The establishment of a forum for policy and policy analysts' interaction has been suggested as a potential solution. Respondent 7 proposed the creation of a forum for policy analyst for technical discussion of Blue Economy Strategic Policy and its key action to facilitate the implementation process. Respondent 5, agreed on the same and made emphasis on the establishment of a committee for policy initiatives.

- **Theme: Incentive**
- **Number of respondents: 1**

Respondent 11 suggested providing economic and incentive support to stakeholders that successfully attain their required objectives through sustainable practices.

Appendix 2

WMU WORLD MARITIME UNIVERSITY

Dear Participant,

Thank you for agreeing to participate in this research survey, which is carried out in connection with a Dissertation which will be written by the interviewer, in partial fulfilment of the requirements for the degree of Master of Science in Maritime at the World Maritime University in Malmo, Sweden.

The topic of the Dissertation is: An examination of key stakeholders' challenges relating to the effective implementation of the Blue Economy Strategic Policy 2018-2030, in Seychelles.

The information provided by you in this interview will be used for research purposes and the results will form part of a dissertation, which will be published online and made available to the public. Your personal information will not be published. You may withdraw from the research at any time, and your personal data will be immediately deleted.

Anonymised research data will be archived on a secure virtual drive linked to a World Maritime University email address. All the data will be deleted as soon as the degree is awarded.

Your participation in the interview is highly appreciated.

Student's name
Specialization

Email address   w1903809@wmu.se

* * *

I consent to my personal data, as outlined above, being used for this study. I understand that all personal data relating to participants is held and processed in the strictest confidence, and will be deleted at the end of the researcher's enrolment.

Name: …………………………………………………………………

Signature: …………………………………………………………………

Date: …………………………………………………………………

Your organization, is considered as a key stakeholder in the implementation of Blue Economy initiatives in Seychelles, has been selected to participate in this study. There are 4 questions and would take no longer that 10 minutes to complete.

I thank you for participating in this study and contributing towards the completion of my Master's Degree.

Thank you.

- **Respondent Details**

Organisation:

Post Title:

Male: Female:

Email Address:

- **Please answer the following questions to best of your knowledge and point of view.**

Question 1

What are the types issues are being encountered by your organization, that hinder the effective implementation of the road 2018-2030?

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Question 2

What are the impacts of these challenges, and how do they affect your organization in the development Blue Economy?

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Question 3

What do you think are the causes of these challenges?

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Question 4

How do you think these challenges can be overcome?

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