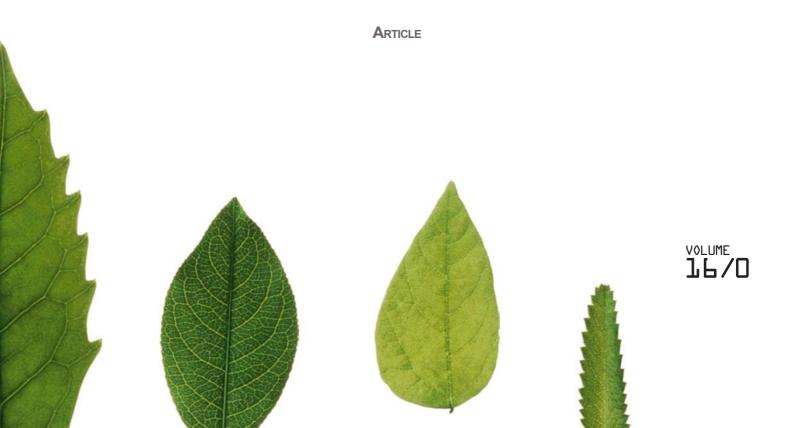


INTEGRATING MARINE SPATIAL PLANNING IN GOVERNING KENYA'S LAND-SEA INTERFACE FOR A SUSTAINABLE BLUE ECONOMY

Olale Philip, Collins Odote and Robert Kibugi



ARTICLE

INTEGRATING MARINE SPATIAL PLANNING IN GOVERNING KENYA'S LAND-SEA INTERFACE FOR A SUSTAINABLE BLUE ECONOMY

Olale Philip, Collins Odote and Robert Kibugi

This document can be cited as

Olale Philip, Collins Odote and Robert Kibugi, 'Integrating Marine Spatial Planning in
Governing Kenya's Land-Sea Interface for A Sustainable Blue Economy',

16/0 Law, Environment and Development Journal (2020), p. 178,
available at http://www.lead-journal.org/content/a1610.pdf

Olale Philip, University of Nairobi ,Centre for Advanced Studies in Environmental Law and Policy (CASELAP);P.O. Box 30197-00100 Nairobi, Kenya, E mail : olalephilip@gmail.com

Collins Odote, University of Nairobi Centre for Advanced Studies in Environmental Law and Policy (CASELAP), Nairobi, Kenya

Robert Kibugi, University of Nairobi Centre for Advanced Studies in Environmental Law and Policy (CASELAP), Nairobi, Kenya

TABLE OF CONTENTS

1.	Introduction	180
2.	Pollution Challenges Facing The Land-Sea Interface In Kenya	182
3.	Spatial Planning Framework For The Land-Sea Interface In Kenya	184
	3.1 Institutional Framework3.2 Types of Spatial Plans	185 186
	3.3 Plan Preparation and Implementation Procedures	188
4.	Plan Preparation and Implementation Procedures	189
	4.1 Sectoral Approach that Limits Institutional Liability	189
	4.2 Sectoral Laws with Conflicting Mandates	189
	4.3 Lack of Specific Type of Spatial Plan for the Land-sea Interface	190
	4.4 Inadequate Link to Environmental Impact Assessment	190
	4.5 Lack of Integration of Marine Protected Area Planning Framework	191
5.	Conclusion: A Move Towards Marine Spatial Planning	192

INTRODUCTION

The land-sea interface is a common heritage resource that must be sustainably managed for the benefit of all. Also referred to as the Coastal Transition Zone (CTZ), it encompasses the area 'where terrestrial activities importantly impinge on the marine environment and where marine activities importantly impinge on the land'. Governance of this zone is vital as it is endowed with diverse resources, including mangrove forests, coral reefs, seagrass beds, and a number of island archipelagos. These resources provide critical habitat for many endangered species as well as important ecosystem services such as carbon sequestration, shoreline protection, regulating freshwater output through evapotranspiration, and carbon storage. These natural resources are essential

in delivering a sustainable blue economy⁵ by supporting livelihood activities such as aquaculture, mariculture, fisheries, tourism, and recreation.

Globally, the land-sea interface contributes to socioeconomic transformation with over 3 billion people relying on coastal and marine biodiversity for their livelihoods.6 Seafood is one of the key economic products with more than 3 billion people depending on the oceans for this important source of protein. The market value of coastal and marine resources and industries is estimated at US\$3 trillion per year, that is, about 5 per cent of global Gross Domestic Product (GDP). ⁸ It is estimated that the global marine fisheries, directly or indirectly, have employed more than 200 million people.9 Across Africa, the blue-economy serves as the main engine for economic growth and livelihoods for about three-quarters of the continent's population. The total gross value of the African coastal and marine fisheries is estimated to be US\$24 billion per year, that is, about 1.26 per cent of the combined GDP of all African countries. 10 Estimates indicate that if properly managed and sustainably used, the

¹ Jakob Granit and others, Water Governance and Management Challenges in the Continuum from Land to the Coastal Sea – Spatial Planning as a Management Tool (SIWI Paper 22, 2014) 1-17 https://www.siwi.org/wp-content/uploads/2015/09/Paper-22-Spatial-Planning-Land-to-Coast-web.pdf.

² Wilhelm Schäfer, Ecology and Paleoecology of Marine Environments (Irmgard Oertel and G Y Craig (trs), 1st edn in 1962, German ed, University of Chicago Press 1972); Drew M Talley and others, 'Research Challenges at the Land-sea Interface' (2003) 58(4) Estuarine Coastal and Shelf Science 699.

³ Food and Agriculture Organization of the United Nations, Survey Findings: Overview of Kenya's Coastal Area (FAO 2018) www.fao.org/docrep/field/003/AC574E/AC574E03.htm.

⁴ Kariuki Muigua, Didi Wamukoya and Francis Kariuki, 'Natural Resources and Environmental Justice in Kenya' (Glenwood Publishers Limited 2015) 472; R Ramesha and others, 'Land-Ocean Interactions in the Coastal Zone: Past, Present & Future' (2005) 12 Anthropocene 85.

⁵ The World Bank defines blue economy to refer to the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health. World Bank and the United Nations Department of Economic and Social Affairs, The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries (World Bank 2017) vi and 1-9 ">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handle/10986/26843/115545.pdf?sequence=1&is-Allowed=y>">https://openknowledge.worldbank.org/bitstream/handl

⁶ United Nations Development Programme, Blue Economy: Community Solutions (UNDP 2018) 9.

⁷ ibid 9

⁸ ibid 9.

⁹ United Nations Environment Programme, why do Sustainable Development Goals matter? Goal 14: Life below water (Data and Statistics/Facts and Figures, UNEP 2018) subpara 6;https://unenvironment.org/explore-topics/sustainable-development-goals-matter/goal-14.

¹⁰ African Ministerial Conference on the Environment, Advancing the Sustainable Blue (Ocean-Based) Economy in Africa (Item 5 (d) of the provision agenda, AMCEN/ 17/6, AMCEN 2019) 3; United Nations Economic Commission for Africa, Africa's Blue Economy: Opportunities and Challenges to bolster Sustainable Development and Socioeconomic Transformation (Issue Paper, UNECA 2019) 11.

contribution of the land-sea interface to the blue economy could lead to a surplus of US\$2 billion in an environmentally sustainable and socially inclusive way for its economies.¹¹

Within the Western Indian Ocean region which includes Kenya, the economic value of coastal and marine goods and services is estimated to be over US\$22 billion per year. Wenya's share marginally stood over US\$4.1 billion per year, which was about 20 per cent of the joint countries in the Western Indian Ocean. This is a contribution of 6.8 per cent to the country's annual GDP US\$60 billion. The coastal tourism takes the largest share, 90 per cent (US\$3.7 billion) annually, of Kenya's ocean economy. Since Kenya lies in the lucrative tuna belt, ti is estimated to have an annual 150,000-350,000 metric tonnes of fish in her expansive maritime territory of 230,000 square kilometers and a distance of 200 nautical miles offshore, which currently remains underexploited. To

Nonetheless, projections indicate an acceleration in economic activity in the oceans at US\$3 trillion in value added by 2030, regardless of the global ocean still being under stress from pollution, over-exploitation, declining biodiversity, and climate change. ¹⁸ The Western Indian Ocean inclusive of Kenya is not exempted from this phenomenon. Its coral cover,

which provides food, habitat, storm protection, medicine, revenue from fishing, and tourism, is assessed to have declined to 30 per cent as of 2017.¹⁹ Thus, the prospects of the land-sea interface to keep supporting a sustainable blue economy seems to be jeopardized. Sustainable blue economy refers to an emerging concept that seeks to promote better stewardship of our oceans and seas, encompassing all their associated coastal and marine resources and their related activities, but not limited to tourism, fisheries, mining, energy, aquaculture, and maritime transport.²⁰ It advocates a multi-sectoral and integrated approach towards the sustainable management of these activities in realizing socio-economic transformation.²¹ In particular, it endeavors to encourage economic growth, social inclusion and preservation, and improvement of livelihoods, whereas at the same time guaranteeing the environmental sustainability of oceans and seas.²²

Consequently, generating the full economic potential of the land-sea interface demands more accountable and sustainable approaches.²³ This will be in line with the Sustainable Development Goal 14, which requires states to conserve and sustainably use the oceans, seas, and marine resources for development.²⁴ The trail to sustainability can be attained if the blue economy is leveraged for sustainable development.²⁵ In other words, pivotal to the blue economy approach, states should rationalize socio-economic development against the degradation of coastal and marine

¹¹ African Ministerial Conference on the Environment (n 10) 2.

¹² United Nations Development Programme, 'Leveraging the Blue Economy for Inclusive and Sustainable Growth' (Policy Brief on Sustainable Blue Economy Conference, Issue No: 6/2018, UNDP April 2018) 5.

¹³ ibid 5.

¹⁴ Africanews, 'Importance of a Sustainable Blue Economy: Statistics and Facts' *Africanews* (Brazzaville, 26 November 2018) https://www.africanews.com/2018/11/26/importance-of-a-sustainable-blue-economy-statistics-and-facts//>.

¹⁵ David Obura, Kenya's Blue Economy – What Now? (CORDIO East Africa, 24 August 2017) https://cordioea.net/kenyas-blue-economy-what-now/.

¹⁶ Africanews (n 14).

¹⁷ ibid; United Nations Development Programme, Leveraging the Blue Economy for Inclusive and Sustainable Growth (n 12) 5.

¹⁸ Mercator Ocean International, What is the Blue Book: Copernicus for a Sustainable Ocean? (Mercator Ocean International 2019) 2, 23.

¹⁹ African Ministerial Conference on the Environment (n

²⁰ John O Kakonge, 'Kenya and the Blue Economy: The Way Ahead' (2019) 8(10) International Journal of Innovative Research & Development 369; African Ministerial Conference on the Environment (n 10) 1.

²¹ United Nations Economic Commission for Africa (n 10) 2.

²² World Bank and United Nations Department of Economic and Social Affairs (n 5) 4.

²³ Mercator Ocean International (n 18) 23.

²⁴ UN General Assembly Resolution 70/1, Transforming our World: The 2030 Agenda for Sustainable Development, UN Doc. A/RES/70/1 (2015).

²⁵ United Nations Development Programme, Leveraging the Blue Economy for Inclusive and Sustainable Growth (n 12) 5-7.

environments and ecosystems through marine spatial planning.²⁶ Marine spatial planning provides an effective approach that can be used to promote sustainable management of the land-sea interface. This is because spatial planning enables reconciliation of uses, provision of the right site for the right use, and controlling of development.²⁷ Through the preparation of a spatial development plan, this management approach provides a pro-active strategic framework for preventing harmful development and mitigating the impact of potentially polluting developments on land or the territorial sea space. The resultant spatial plans will create a potential nexus and synergy between socio-economic development and coastal and marine conservation as well as rehabilitation.²⁸ This will in turn lead to an increase in the sustainability of the ocean economy while harnessing its benefits.²⁹

Therefore, the question that this paper grapples with is the extent to which Kenya has incorporated marine spatial planning within its land-sea interface governance framework. The paper argues that the framework does not adequately focus on the need for integrated planning of land and sea uses. Instead, the law continues with the traditional focus on land use planning at the expense of sea use planning, hence, compromising the quest for sustainable management of the coastal and marine resources, a crucial requirement in ensuring a sustainable blue economy. The paper concludes that to achieve a sustainable blue economy, Kenya's law and planning practices must incorporate the prerequisites of marine spatial planning, which have been adopted in other jurisdictions with similar circumstances, as a framework for integrated planning.

2

SamplePOLLUTION CHALLENGES FACING THE LAND-SEA INTER-FACE IN KENYA

Under Kenya's constitutional framework, the landsea interface is categorized as public land covering the territorial sea, the exclusive economic zone, the sea bed, the continental shelf, and all the land between the high and low watermarks.³⁰ Kenya's coastline entails an approximate 600 km stretch along the seafront, stretching from the Ikashani border of Somalia to the north (Longitude 1° 41' S) up to the Vanga border of Tanzania's in the south (Longitude 4° 40' S). 31 The Kenyan coast has a narrow (5-10km wide) coastal plain with various coastal and marine ecosystems that are rich in biodiversity.³² It is characterized by a fringing reef running parallel to the shoreline at distances ranging from 500m-2km offshore.³³ Under the devolved system, the coastal zone traverses the boundary of five counties including Mombasa, Kilifi, Kwale, Tana River, and Lamu - see figure 1. Land and sea-based activities that include tourism (45 per cent), ports and shipping (15 per cent), agriculture (11 per cent), forestry (4 per cent), and mining (2 per cent) continue to thrive within the interface.³⁴Other activities include mariculture and aquaculture, fisheries, salt production, oil and gas exploration, industrial development, service infrastructure (road, rail, energy, water, sewer), and human settlements.³⁵

²⁶ United Nations Development Programme, Blue Economy: Community Solutions (n 6) 9-11.

²⁷ T O Ilegbune, The Relationship between Planning Law and Environmental Law (Unpublished MPhil Seminar Paper, Faculty of Law University of Lagos 2000).

²⁸ ibid.

²⁹ Mercator Ocean International (n 18) 23.

³⁰ The Constitution of Kenya 2010, art 62(j), (k) and (l).

³¹ Government of Kenya, State of the Coast Report: Towards Integrated Management of Coastal and Marine Resources in Kenya (National Environment Management Authority 2009) 1.

³² Government of Kenya, Pollution Prevention and Control Guidelines for the Coastal and Marine Environment of Kenya (National Environment Management Authority 2012) 2-4; Government of Kenya, State of the Coast Report (n 31) 1.

³³ Pollution Prevention and Control Guidelines for the Coastal and Marine Environment of Kenya, ibid 1-5; Government of Kenya, State of the Coast Report (n 31) 8-11

³⁴ Government of Kenya, State of the Coast Report (n 31) 31.

³⁵ ibid 37-45.

column.41

More often than not, these diverse uses conflict with and undermine each other, leading to pollution.³⁶ It is estimated that 82 per cent of marine pollution is land-based, originating from sewage outlets, industrial effluents, runoff from urban stormwater and agricultural activities, water-borne and air-borne pollution, and litter.³⁷ In Kenya, the main sources include point-source pollution such as discharge from sewage and different industries and non-point source pollution emanating from unregulated or unchanneled sources, which includes run-off from agricultural activities, drainage or discharge, as well as atmospheric deposition.³⁸ For instance, some hospitality developments use the ocean to dump untreated wastewater, leading to pollution.³⁹ It is estimated that only 20 per cent of the population within the coastal zone has sewage disposal, with the rest of the untreated sewage finding its way into the ocean.⁴⁰ Another use of the interface, which contributes to pollution, is port and shipping. The only estimates of the amount of pollution caused by port and shipping are those that were carried out in 1993. These estimates indicated that oil pollution from regular spills and leaks at the port was valued at 10 tons per day, leading to values

Additional pollution within the interface is also

that range from 0.1 mg/l to 7.0 mg/l in the water

manifested by the proliferation of unplanned uses that have led to development with little consideration of the long-term impacts of the activities. 42 There are salt mining companies that have built dykes, which interfere with the free flow of water from the sea.⁴³ Similarly, freshwater sources from which the surrounding community traditionally drew its water have been contaminated by underground salt seepages. 44 The land-sea interface is also experiencing a proliferation of tourism activities that have generated demand for both land and ocean space, creating conflicts over use and having a significant impact on the environment.45 This has led to the destruction of endangered marine ecosystems (coral reefs, lagoons, and fragile sandy beaches). 46 The overall impact is that Kenya's land-sea interface is not sustainably governed but rather threatened by over-exploitation resulting in pollution. To address this situation, Kenya uses different spatial planning tools such as land use planning, zoning ordinances, sectorial management plans, development control permits, and environmental impact assessments and audits to regulate the impact of land and sea-based uses.⁴⁷

³⁶ United Nations Environment Programme, Training Manual on International Environmental Law (Manual, UNEP 2006) 1-392 https://wedocs.unep.org/handle/ 20 500 11822/20599>

³⁷ ibid 147; Yousef H Almutairi, Protection of the Marine Environment under International Law and Kuwaiti Criminal Law (SJD Dissertation, Pace University School of Law 2016).

³⁸ Government of Kenya, Pollution Prevention and Control Guidelines for the Coastal and Marine Environment of Kenya (n 32) 13-61.

³⁹ D Munga and others, Land-Based Activities, Pollution Sources and Levels in Water and Sediment in the Coastal and Marine Area of Kenya (Technical Report, Kenya Marine and Fisheries Research Institute 2006) http:// hdl.handle.net/1834/6888>; Government of Kenva, Pollution Prevention and Control Guidelines for the Coastal and Marine Environment of Kenya (n 32) 50-

⁴⁰ Government of Kenya, Pollution Prevention and Control Guidelines for the Coastal and Marine Environment of Kenya (n 32) 7 and 39; Mweu Nguta, Marine Pollution and Research in the Coastal Lagoons of Kenya (Conference Paper, Kenya Marine and Fisheries Research Institute 1993) <www.oceandocs.org/bitstream/handle/1834/7152/</p> ktf0148.pdf?sequence=1>.

⁴¹ Nguta, ibid 86.

⁴² John S Akama, The Efficacy of Tourism as a Tool for Economic Development in Kenya (1990) http:// citeseerx.ist.psu.edu/viewdoc/ download?doi=10.1.1.603.7432&rep=rep1&type=pdf?>.

⁴³ Kenya National Commission on Human Rights, Economic Interests Versus Social Justice: Public Inquiry into Salt Manufacturing in Magarini, Malindi District (KNCHR 2006) 18.

⁴⁵ Coast Development Authority, Towards Integrated Management and Sustainable Development of Kenya's Coast (CDA 1996) 1-88; Akama (n 42) 3-4; Government of Kenya, State of the Coast Report (n 31) 51-52.

⁴⁶ Akama (n 42) 3-4.

⁴⁷ Nixon Sifuna, 'Public Regulation of the Use of Private Land: Opportunities and Challenges in Kenya' (2009) 5(1) Law, Environment and Development Journal 38, http://www.lead-journal.org/content/ 09038.pdf>; Philip Olale, Collins Odote and Robert Kibugi, 'Assessing Efficacy of Kenya's Spatial Planning Tools Towards Sustainable Management of the Land-Sea Interface' (2019) 4(5) International Journal of Innovative Research and Knowledge 33 http:// ijirk.com/issue_image/IJIRK-4.05.04.pdf>.

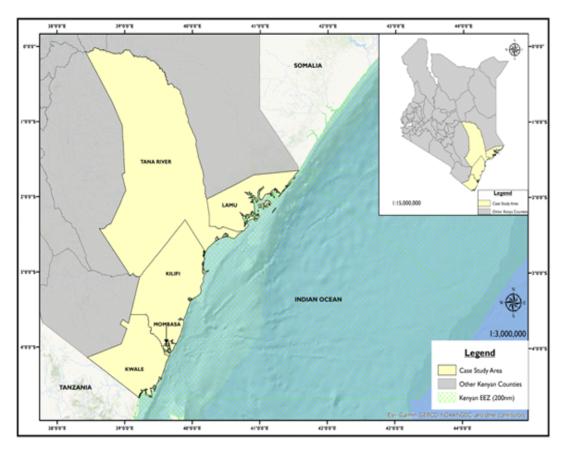


Figure 1:Map showing the land-sea interface in Kenya

3

SPATIAL PLANNING FRAMEWORK FOR THE LAND-SEA INTERFACE IN KENYA

The United Nations Convention on the Law of the Sea (UNCLOS) bestows on all Coastal States including Kenya exclusive jurisdiction within a 200-nautical mile called the exclusive economic zone (EEZ).⁴⁸ Within

this EEZ such states have sovereign rights to utilize natural resources, carry out specific economic activities such as fishing and tourism, ensure environmental protection, and also carry out marine research. ⁴⁹ Under the auspices of the Sustainable Development Goals, such States are called upon to sustainably use and manage terrestrial and marine resources. ⁵⁰ Target 14.1 provides that by 2025 parties shall 'prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution'. ⁵¹ Moreover, UNCLOS

⁴⁸ United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, 1833 UNTS 3 art 57.

⁴⁹ ibid art 58 and 77.

⁵⁰ Sustainable Development Goals and Targets, in UN General Assembly Resolution 70/1, Transforming our World: The 2030 Agenda for Sustainable Development, UN Doc. A/RES/70/1 (2015), goals #14-15.

⁵¹ ibid, goal #14.1.

has obligated coastal states to take measures to minimize pollution from dumping, control pollution caused by the use of technologies, and to protect and preserve rare or fragile ecosystems. Meeting these obligations require states to regulate the uses of land adjacent to seas in order to control pollution and promote sustainability. Spatial Planning can act as a useful tool for regulating land use activities in Kenya as well as within the expanded constitutional definition of land that includes marine waters in the exclusive economic zone.

Due to the importance of the land-sea interface, Kenya has an obligation to manage it for the benefit of present and future generations.⁵² The Constitution of Kenya provides that such land resource is held by the national government in trust for the people and administered on their behalf by the National Land Commission.⁵³ Further, the Constitution obligates the state to ensure sustainable exploitation, utilisation, management, and conservation of such a natural resource and ensure an equitable sharing of the benefits accrued.⁵⁴ This is in compliance with article 42 of the Constitution which provides that every person has a right to a clean and healthy environment. Thus, the state is obligated to manage the land-sea interface resources by increasing the mangrove forest cover to at least 10 per cent, protecting indigenous resources and biological diversity, public participation, environmental impact assessment, environmental audit, and monitoring the environment.55

The police power of a state is an important tool to ensure sustainable management of such resources and an equitable sharing of the accruing benefits. According to Havran, police power refers to the powers of the state to regulate and control the use of property to secure general safety, public welfare, order, and good morals of the community. ⁵⁶ Sifuna notes that in Kenya, police power is implemented through a number of tools including land use planning, zoning, prohibition of certain activities through development

control, and licensing of proposed land use activities.⁵⁷ Hence, while adopting the 2010 Constitution, Kenya focused on extending police power to land use planning. Today, the Constitution gives the state the power to 'regulate the use of any land, or any interest in or right over any land, in the interest of defence, public safety, public order, public morality, public health, or land use planning.⁵⁸ With respect to the land-sea interface, the Constitution expanded the definition of land to include all water bodies and marine waters in the territorial sea and the exclusive economic zone.⁵⁹ Therefore, the state has the inherent power to regulate the use of the land-sea interface through spatial planning.

Spatial planning in Kenya is regulated by the Constitution of Kenya, 2010, the National Land Use Policy 2017, and the two main statutes: the Physical and Land Use Planning Act of 2019 and the Environmental Management and Coordination Act (EMCA).⁶⁰ Within the land-sea interface, other sectoral laws, including Wildlife Conservation and Management Act No. 47 of 2013, Forest Conservation and Management Act No. 34 of 2016, National Museums and Heritage Act No. 6 of 2006, Fisheries Management and Development Act, 2016 and Kenya Maritime Authority Act Cap 370, also apply in regulating the respective activities. Understanding Kenya's spatial planning approach requires a review of its institutional framework for administration; types and content of plans, plan preparation, and implementation procedures.

3.1 Institutional Framework

In 2010, Kenya promulgated a new Constitution which provided overarching provisions on spatial planning. The Constitution of Kenya, 2010 redefined the practice of spatial planning and development control. Accordingly, the Kenyans settled for a multi-dimensional approach to the organization and management of governance and state power and hence, the devolved system of government.⁶¹ Thus, the

⁵² The Constitution of Kenya 2010 art 42.

⁵³ The Constitution of Kenya 2010 art 62(3).

⁵⁴ The Constitution of Kenya 2010 art 69(1)(a).

⁵⁵ The Constitution of Kenya 2010 art 69(1).

⁵⁶ T D Havran, 'Eminent Domain and the Police Power' (1930) 5 Notre Dame L Rev 380.

⁵⁷ Nixon Sifuna (n 47) 49.

⁵⁸ The Constitution of Kenya 2010 art 66.

⁵⁹ The Constitution of Kenya 2010 art 260.

⁶⁰ Environmental Management and Coordination Act 1999.

⁶¹ The Constitution of Kenya 2010 art 10(2)(a).

Constitution created two levels of government, namely, national and county governments. ⁶² It assigned functions to the two levels of government, allocated finances, and demarcated the geographical territory for each county. ⁶³ As a result, the preparation of spatial plans, which was hitherto preservation of the national government, was devolved giving county governments more responsibility in the preparation and implementation of spatial plans. ⁶⁴ The Constitution also established the National Land Commission (NLC) with the responsibility to monitor and oversee the land use planning throughout the country. ⁶⁵ In relation to the land-sea interface, the Constitution provides that such land shall be held by the national government and administered by the NLC. ⁶⁶

The diverse socio-economic activities and natural resources found in Kenya's land-sea interface call for additional sectorial government agencies for its planning and regulation. The leading agencies dealing with coastal and marine-related issues include Kenya Wildlife Services (KWS), which manages Marine parks and reserves through management plans;⁶⁷ Kenya Forest Service (KFS), which is mandated to conserve, protect, and manage all public forests including the mangrove forests;68 National Museums of Kenya, which are responsible for forests within the coastal zone declared as protected areas and also for monuments;⁶⁹ the Fisheries Department (FD), which is responsible for development, management and conservation of fishery resources and also for aquaculture development, fish safety, and quality assurance;⁷⁰ the Kenya Marine and Fisheries Research Institute (KMFRI), which is responsible for all aspects of aquatic research including biological, physical, and chemical oceanography, pollution, fisheries, aquaculture, fishing technology and

fish processing; and the Kenya Maritime Authority, which is responsible for monitoring, regulating and coordinating the maritime activities in the country.⁷¹

There is the National Environment Management Authority (NEMA) with the responsibility of general supervision and coordination of all matters relating to the environment.⁷² NEMA is mandated to coordinate various environmental management activities being undertaken by leading agencies and may direct such agencies to perform such roles as related to environmental management.⁷³ Such co-ordination by NEMA is supposed to realise the integration of environmental considerations into development policies, plans, programmes and projects for proper management and rational utilization of environmental resources.⁷⁴ Thus, the Authority is mandated to ensure that all proposed developments undergo an environmental impact assessment to demonstrate their impacts on the environment.⁷⁵ In doing so, the Authority is supposed to ensure stakeholder participation by publishing the report in the Gazette and in newspapers to enable people to submit their comments. 76 The Authority also involves other sectoral agencies by requiring them to comment on the proposed developments within their areas of jurisdiction.7

3.2 Types of Spatial Plans

The Physical and Land Use Planning Act, 2019 provides for different levels and types of spatial plans, hereinafter termed as physical and land use development plans. These spatial plans include the national physical and land use development plans, ⁷⁸ the inter-county physical and land use development plans, ⁷⁹ the county physical

⁶² The Constitution of Kenya 2010 art 175.

⁶³ The Constitution of Kenya 2010 art 186.

⁶⁴ The Constitution of Kenya 2010 sch 4.

⁶⁵ The Constitution of Kenya 2010 art 67.

⁶⁶ The Constitution of Kenya 2010 art 62(3).

⁶⁷ Wildlife Conservation and Management Act 2013, ss 6 and 7.

⁶⁸ Forest Conservation and Management Act 2016, ss 7 and

⁶⁹ National Museums and Heritage Act 2006, s 25.

⁷⁰ Fisheries Management and Development Act 2016.

⁷¹ Kenya Maritime Authority Act 2006 (KMA 2006) cap 370 s 5(1)(b).

⁷² Environmental Management and Coordination Act 1999, ss 7 and 9.

⁷³ ibid, ss 9 and 12.

⁷⁴ ibid, s 9.

⁷⁵ ibid, s 58.

⁷⁶ ibid, s 59.

⁷⁷ ibid, s 60.

⁷⁸ Physical and Land Use Planning Act 2019, s 21.

⁷⁹ ibid s 30.

and land use development plans,⁸⁰ and the local physical and land use development plans.⁸¹

Spatial planning at the national level includes the preparation of broad planning policies and strategies that lay down directions and areas of emphasis.⁸² Such plans provide guidance and information regarding all planning and development decisions on any land in Kenya and become binding upon approval.⁸³ All decisions with regard to planning, management, and development must be aligned with the national plans and strategies of the nation as contained in the national physical and land use development plan.⁸⁴ Thus, plans prepared at this level provide a framework for harmonization and the subsequent formulation of lower-level plans.⁸⁵ In 2015, Kenya adopted its first such plan called the National Spatial Plan (NSP) 2015-2045. The geographical scope of the plan covers the entire territory of Kenya measuring approximately 582,646 km² including 21km² of the Exclusive Economic Zone (EEZ).86 With respect to coastal areas, NSP calls for strict regulation of marine resources through the preparation of coastal management plans. For example, it provides that spatial development plans should be prepared to guide the implementation of flagship projects for the tourism sector.

The inter-county physical and land use development plans are another level of planning which involves preparing plans for areas covering two or more counties. ⁸⁷ This level of planning provides a typology of spatial plans that can be used for managing the land-sea interface in Kenya. This is because the land-sea interface traverses the boundary of five counties (Mombasa, Kilifi, Tana River, Lamu, and Taita Taveta). Therefore, in line with the provisions of section 29 of the Physical and Land Use Planning Act⁸⁸ read together

with the NSP requirement for the preparation of a coastal management plan, these counties are supposed to formulate an inter-county physical and land use development plan to regulate all land and sea uses within the land-sea interface. The scope of the plan is to be determined by the participating counties as provided by section 30.⁸⁹ The danger of this provision is that unless the counties consider the land-sea interface a priority, they may exclude it from the scope of the plan.

The other type of plan that can be used to regulate activities at the land-sea interface is the County Physical and Land Use Development Plan. 90 The Act mandates each county government to prepare a county spatial plan to guide, harmonize, and facilitate development within each county. 91 These plans provide an opportunity for all the four coastal counties to formulate a county spatial plan. However, the law still focusses on land uses and therefore, the plans are supposed to indicate desired patterns of land use, provide strategic guidance in respect of the location and nature of development, set out basic guidelines for a land use management system, set out a capital investment framework for the county's development programs, contain a strategic assessment of the environmental impact of the spatial development framework, and indicate the areas designated for conservation and recreation for which the land-sea interface would be considered. 92 These provisions under the Physical and Land Use Planning Act have not been cross-referenced with similar provisions in the County Government Act 2012. The lack of crossreferencing has a potential for conflict as both these Acts provide for two different plan typologies in the same jurisdiction. For example, the Physical and Land Use Planning Act requires preparation of a County Physical and Land Use Development Plan while the County Government Act 2012 requires preparation of a county spatial plan.

⁸⁰ ibid s 36.

⁸¹ ibid s 45.

⁸² ibid s 22 (1).

⁸³ ibid s 22 (2).

⁸⁴ ibid s 22 and 27.

⁸⁵ ibid s 27.

⁸⁶ National Spatial Plan 2015, ch 1 (pt 1.3).

⁸⁷ Physical and Land Use Planning Act 2019, s 2.

⁸⁸ Provides for the formation of an inter-county joint physical and land use planning committee to oversee the formulation of the inter-county physical and land use development plan.

⁸⁹ Mandates the definition of scope and geographical area of the inter-county physical and land use development plan.

⁹⁰ Physical and Land Use Planning Act 2019, s 36.

⁹¹ County Governments Act 2012, ss 107 and 110.

⁹² ibid s 110(2).

In 2016, Lamu County adopted and approved a County Spatial Plan, which recognized both the terrestrial and the territorial sea space as part of the planning area with important benefits to its blue economy. The Lamu spatial plan has zoned the landsea interface as a conservation zone with only compatible uses permitted under strict development control regulations. 93 In addition, the plan has provided for land use regulations that seek to integrate urban development, economic activities such as fishing and tourism with the natural heritage of the ocean ecosystem. 94 Other than Lamu County, the rest of the remaining four coastal counties (Mombasa, Kilifi, Tana River, and Kwale) do not have county spatial plans. This implies that these four counties have not complied with schedule 4 of the Constitution of Kenya, which allocates the role of preparation of county spatial plans to the respective county governments. The lack of county spatial plans for these four coastal counties limits the integration of the land-sea interface planning and regulation in their operations, leading to unregulated land and sea uses.

In addition to the above plans, there are a number of laws that provide for the preparation of sector-specific management plans for specific natural resources. A management plan establishes direction and goals for the management, conservation, and utilization of a specific resource land area. For example, Section 55(2) and (3) of EMCA mandates NEMA to prepare a survey of the Coastal Zone and thereafter, develop an integrated national coastal zone management plan every two years. The survey and plan should contain an inventory of all structures, roads, excavations, harbours, outfalls, dumping sites, and other works located in the coastal zone; an inventory of the state of the coral reefs, mangroves, and marshes found within the coastal zone; an inventory of all areas within the coastal zone of scenic value or value for recreational and cultural purposes; and an estimate of the extent, nature, causes, and sources of coastal pollution and

3.3 Plan Preparation and Implementation Procedures

Preparing physical and land use development plans constitute four critical stages, which include plan initiation, plan development based on situational analysis, plan approval, and plan implementation. 101 Plan initiation involves an official declaration of the intention to plan and is articulated through an advertisement by the Government. 102 The main aim of this procedure is to inform the public of the intention to plan so as to allow them an opportunity to participate in the plan development and later implementation. Plan development involves an analysis of the existing data on the planning area to aid the formulation of future scenarios for development and the requisite regulations to guide such development. 103 Public participation in the process is ensured through the publication of notices of plan completion, which allows the stakeholders to

degradation.⁹⁵ The other management plan targets mangrove forests and is prepared under the Forest Conservation and Management Act No. 34 of 2016.⁹⁶ The Kenya Forest Service has the overall mandate to prepare it. 97 However, there are also other forests within the coastal zone declared as protected areas by the National Museums of Kenya. 98 Another sector management plan prepared within the land-sea interface is the wildlife management plan prepared under the Wildlife Conservation and Management Act, 2013.⁹⁹ It applies to marine national parks and marine national reserves which are found within the land-sea interface. 100

⁹³ County Government of Lamu, Lamu County Spatial Plan (10 Year Spatial Plan, Vol II, County Government of Lamu 2016), ch 4. http://www.kpda.or.ke/ documents/County_Spatial_Plans/Lamu%20-County%20Spatial%20Plan%20ARBRIDGED%-20VERSION%20Vol%20II.pdf>.

⁹⁴ ibid ch4.

⁹⁵ Environmental Management and Coordination Act 1999,

⁹⁶ Forest Conservation and Management Act 2016, s 47.

⁹⁷ ibid s 42.

National Museums and Heritage Act 2006, s 25.

⁹⁹ Wildlife Conservation and Management Act 2013, s 3A.

¹⁰⁰ ibid s 3A

¹⁰¹ Ministry of Lands and Physical Planning and Council of Governors, County Spatial Planning Guidelines: Towards Sustainable Development and County Effectiveness (Government Printer 2018) 1-79.

¹⁰² ibid 36 and 64.

¹⁰³ ibid 22-33.

access the draft plans from the respective county offices for comments. 104

After the plan is developed, it undergoes approval and adoption to finally become a legally enforceable document. This phase involves the holding of a public hearing, approval and adoption of the plan by the relevant authority under which it was prepared, and a public gazette notice of the approved plan. Plan implementation involves regulating land and sea uses to ensure that operations on land conform to the approved spatial development plans as well as other policy guidelines, regulations, and standards. This includes enforcement through the process of development control.

4

REGULATORY GAPS AND CHALLE-NGES

The spatial planning framework has a number of regulatory gaps in relation to the sustainable management of the land-sea interface. These include a sectoral approach that limits institutional liability, numerous sectoral laws with conflicting mandates, lack of a specific type of spatial planning for the land-sea interface, inadequate integration to environmental impact assessment, lack of integration of Marine Protected Area planning framework, and lack of harmonization of an offence relating to development permits.

4.1 Sectoral Approach that Limits Institutional Liability

There is the challenge of institutional liability due to the lack of a specific institution mandated with overall responsibility of spatial planning and development control within the land-sea interface and especially

104 Physical and Land Use Planning Act 2019, ss 23(1)(c), 40 and 55(1)(g).

within the territorial waters. Okidi argues that the agency responsible for local and regional physical and environmental planning in the marine area of Kenya should be specified. He particularly notes that due to this limitation, there is potential for conflict within the continental shelf among legally permissible activities such as exploration and production of oil, laying of submarine cables, and mariculture. We have the agency of the state of the stat

Spatial planning for a land-sea interface would involve the county governments in which the interface lies. In the Kenyan case, these are the counties of Mombasa, Kilifi, Tana River, Lamu, and Taita Taveta. However, a part of the interface is the territorial sea, the control of which is outside the jurisdiction of counties as per the Constitution, which vests it on the National Government. This would mean that a purely countyled planning approach would not adequately address the prerequisites of the land-sea interface. There are also multiple other institutions responsible for various aspects of the land-sea interface, making it difficult to determine the institution with the overall or coordinating function.

4.2 Sectoral Laws with Conflicting Mandates

Within the land-sea interface, there are also other laws governing sectoral aspects such as tourism activities ¹⁰⁷, marine parks, ¹⁰⁸ mangrove forests, ¹⁰⁹ and antiquities. ¹¹⁰ Thus, the land-sea interface has had a sectoral approach to spatial planning, management, and enforcement of development control, where each activity is separately managed by a different legal framework. ¹¹¹ Each of the national agencies has its own separate legislation, resulting in overlapping and sometimes conflicting mandates in addressing the

¹⁰⁵ Charles O Okidi, P Kameri-Mbote and Migai Akech (eds), Environmental Governance in Kenya: Implementing the Framework Law (East African Educational Publishers 2008) 1-554.

¹⁰⁶ ibid 1ff.

¹⁰⁷ Tourism Act 2011, s 1-124.

¹⁰⁸ Wildlife Conservation and Management Act 2013, s 3A.

¹⁰⁹ Forest Conservation and Management Act 2016, s 42.

¹¹⁰ National Museums and Heritage Act 2006, s 38.

¹¹¹ Government of Kenya, State of the Coast Report (n 31) vii-ix and 69-70.

coastal and marine issues. 112 This challenge is manifested in the regulations on pollution and its control, which are spread over several Acts with different enforcing agencies. 113 For instance, Kenya Wildlife Services (KWS) has the mandate to manage Kenya's marine parks and reserves while the Fisheries Department oversees the exploitation and management of the fisheries within the marine parks and reserves. In this scenario, it is notable that while the Fisheries Department promotes sustainable use, KWS only allows preservation. This conflict in the management approach has resulted in confusion on the ground in terms of what activities to permit and what to prohibit. 114 As noted by Granit et al, the resulting overlaps or inconsistencies in sectoral planning, regulation, and management often make the implementation and monitoring of planning frameworks for pollution regulation difficult at the local, national, and transboundary levels. 115

4.3 Lack of Specific Type of Spatial Plan for the Land-sea Interface

While there are plans that can be used to regulate the land-sea interface, they do not expressly speak on the interface as a distinct geographical level requiring a specific spatial planning approach. Therefore, their application within the land-sea interface means that the unique issue of linkages between land and sea is not taken into consideration from a planning perspective. Despite the lack of an outright level of spatial planning at the land-sea interface, section 52 of the Physical and Land Use Planning Act, 2019 indirectly embraces the opportunity for the land-sea interface to be planned as a special planning area.

The Act provides that a special planning area can be declared if: that area has a unique development, natural resource, environmental potential or challenges; the

development of that area might have a significant effect beyond that area's immediate locality; and if the declaration is meant to guide the implementation of strategic national projects or the management of internationally shared resources. ¹¹⁶ In line with these provisions, the land-sea interface may arguably be considered as a special planning area due to its unique role as a coastal transition area that links both terrestrial and marine environments and biodiversity. The danger is that the law does not recognize an explicitly integrated planning of the land-sea interface or the internationally recognized framework of marine spatial planning, which provides an approach for integrated land and sea use planning.

4.4 Inadequate Link to Environmental Impact Assessment

The EMCA provides that any activity out of character with its surroundings, any structure of a scale not keeping in with its surroundings, and any major changes in land use ought to be subjected to the EIA. 117 Thus, the repealed Physical Planning Act of 1996 required all development applications for industrial location, dumping sites, sewerage treatment, quarries, or any other development activity, with the potential to injuriously impact the environment, to submit an environmental impact assessment report before the issuance of a development permit. 118 However, this provision was not included in the substantive sections of the new Act. Nonetheless, it is contained in the third schedule of the Act, which requires applications for major developments to be subjected to environmental and social impact assessment. The challenge here is that the law does not define what 'major development' means, which could lead to the counties issuing development permits to some developments not considered major and likely to injure the environment.

The need for linking environmental impact assessment and approval of developments for construction was

¹¹² David O Obura, 'Kenya' (2001) 42(12) Marine Pollution Bulletin 1264.

¹¹³ ibid 1264-1278.

¹¹⁴ R Swanson, K Menczer and G Michaels, Kenya Forest and Coastal Management Programs: Mid Term Evaluation (2006) 1 http://pdf.usaid.gov/pdf_docs/PDACJ-160.pdf.

¹¹⁵ Granit and others (n 1) 5.

¹¹⁶ Physical and Land Use Planning Act 2019, s 52.

¹¹⁷ Environmental Management and Coordination Act 1999, sch 2

¹¹⁸ Physical Planning Act 1996, s 36.

canvassed in Kwanza Estates Ltd v Kenya Wildlife Services. 119 In this case, the plaintiff argued that the respondent had commenced construction of a public toilet on the beachfront, which was adjacent to his property, without conducting an Environmental Impact Assessment (EIA). The plaintiff prayed for temporary restraining orders arguing that when in full use, the public toilet would have adverse environmental consequences as a result of the discharge of effluents emanating from the toilet into the sea eventually devaluing his property. In determining the case, the Judge noted that other than the issue of EIA, none of the parties had addressed the law pertaining to land use as contained in the Physical Planning Act. This assertion by the Judge demonstrates the weak link of land use planning and environmental impact assessment. The Judge ruled that the absence of an Environment Impact Assessment (EIA) denied the plaintiff and the court an opportunity to know how the effluents from the said toilet are to be disposed of or treated before draining the same to the ocean. The Judge reiterated the need for the approval of the proposed development from NEMA before proceedings with the construction.

A similar point was made by the court in Mohamed Ali Baadi v. Attorney General, concerning a failure to subject the Lamu Port-South Sudan Ethiopia-Transport Corridor project (LAPSSET) spatial masterplan to adequate environmental and social impact assessment (ESIA), and a lack of strategic environmental assessment (SEA). 120 The LAPSSET project is a largescale transportation and infrastructure development project with distinct infrastructure components including a railway, oil pipelines, oil refineries, tourism development, and a 32-berth port at Manda Bay in Lamu. The plaintiffs claimed that the government was going ahead with the implementation of the project without conducting a SEA, which would have enabled them to understand the comprehensive environmental and social impacts of the project. The respondents argued that SEAs were not legally required until 2015

4.5 Lack of Integration of Marine Protected Area Planning Framework

Marine protected area planning relates to planning carried within the on-shore or offshore area set aside for management and conservation measures or within areas where some degree of protection, whether enacted or not, is exercised at the land-sea interface. 121 In Kenya, this is carried out through the Protected Areas Planning Framework (PAPF), developed and adopted by the Kenya Wildlife Services (KWS) in 2006. 122 KWS is mandated to prepare and implement management plans for all marine parks within the coastal land-sea interface. 123 It is envisaged that the preparation and adoption of these management plans shall encompass wider consultation with the county wildlife conservation committee and participation of the neighboring communities. 124 However, there is no provision requiring consultation with the County Government which is in charge of spatial planning and development control within the entire county where these marine protected areas are found. Also, the Physical and Land Use Planning Act, 2019 does not have any provisions requiring coordination and linkage of the marine management plans with the wider county spatial plans.

when amendments to the EMCA took effect. However, the Court found the SEA to be legally required at the time, and even though it was not specified in the EMCA, it was still mandatory as per the NEMA regulations of 2003. Therefore, it did not need backing from a specific statutory text to be effective. Now SEAs are required for 'plans' under section 58A of the EMCA. This implies that even the county spatial plans would require SEAs as a part of their approval for implementation.

¹¹⁹ Kwanza Estates Ltd v Kenya Wildlife Services [2013] eKLR 133 (HC Civ Div).

¹²⁰ Mohamed Ali Baadi and others v Attorney General & 11 others [2018] eKLR 22 (HC).

¹²¹ Alan T White, Catherine A Courtney and Albert Salamanca, 'Experience with Marine Protected Area Planning and Management in the Philippines' (2002) 30(1) Coastal Management 1.

¹²² Kenya Wildlife Service, Protected Area Management Plans (2007) http://www.kws.go.ke/content/protected-area-management-plans-0>.

¹²³ Wildlife Conservation and Management Act 2013, s 3A. 124 ibid s 3A.

4.6 Lack of Harmonization of Offence Relating to Development Permitting

The Physical and Land Use Planning Act, 2019 has expressly prohibited carrying out of development without a development permit issued by the county. 125 The Act provides that any person who has commenced any type of development without obtaining the development permit is liable to pay a fine not exceeding five hundred thousand shillings or to incarceration for a term not exceeding two months or both. 126 However, the penalties under section 57 are different than those under section 67 for the similar offence of commencing a development project when the development permit has been revoked. The penalties under section 67 are heavier than those under section 57, whereupon conviction such a person may get a fine of not less than one million shillings or imprisonment for a term of not less than 5 years or both. This portends a challenge in the application of the law especially in litigations where developers have carried out development activites along the land-sea interface without obtaining development permits. More importantly, the lack of provisions for the preparation of a specific spatial plan for the land-sea interface renders application of offences and penalties null and void due to lack of an approved plan which forms the basis for seeking a development permit.

5

CONCLUSION: A MOVE TOWARDS MARINE SPATIAL PLANNING

While the 2010 Constitution has provided a wider scope for spatial planning by including territorial waters as a part of 'land' to which the state's police power applies, the applicable planning law of 2019 has not adequately provided the framework for realizing this

125 Physical and Land Use Planning Act 2019, s 57(1).

constitutional provision. Analysis of Kenya's spatial planning framework has demonstrated a weak link and focus on integrated spatial planning, which is critical for effective regulation of activities within the land-sea interface. There is still a continued focus on terrestrial planning, despite the Constitution and the National Land Use Policy recognizing the need for inclusion of spatial planning of the coastal zone. The applicable Physical and Land Use Planning Act of 2019 neither recognizes 'land' to include the territorial sea nor does it expressly provide that it regulates uses both on land and on the sea. This traditional focus on planning land-based activities, without deliberate recognition of how these developments affect the sea and vice-versa, continues to jeopardize the sustainable management of the land-sea interface and by large, the blue economy.

A review of planning approaches from other jurisdictions with similar coastal zones has demonstrated that marine spatial planning (MSP) is an appropriate tool to ensure sustainable and integrated management of human activities within the land-sea interface. 127 This is because MSP provides a framework for identifying the most appropriate area for different uses to reduce or mitigate environmental impacts and facilitate a sustainable blue economy through reasonable utilization as well as increased socio-economic efficiency and ecological security. It also provides an opportunity for long-term planning so that the process of controlling development becomes predictable and transparent. This will ensure that there is greater certainty in development permissions and allocation of uses for both developers and environmental managers. Thus, the result of the MSP

126 ibid s 57(2).

¹²⁷ A Deidun, S Borg and A Micallef, 'Making the Case for Marine Spatial Planning in the Maltese Islands' (2011) 42 (1-2) Ocean Development & International Law 136; Charles N Ehler and Fanny Douvere, Visions for a Sea Change. Report of the First International Workshop on Marine Spatial Planning (Intergovernmental Oceanographic Commission and Man and the Biosphere Programme, UNESCO 2007) http://www.jodc.go.jp/jodcweb/info/ioc_doc/Manual/153465e.pdf; Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014, Establishing a framework for maritime spatial planning (OJL 257/135 2014) http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.-257.01.0135.01.ENG%20.

process will be an extensive and all-inclusive spatial plan for Kenya's land-sea interface.

An integrated land-sea planning approach can help mitigate many of the potential problems associated with increased human activity in coastal communities by addressing the human use of land, freshwater, and marine resources while also working to maintain the integrity of terrestrial, aquatic, and marine/estuarine ecosystems. 128 Commentators have continued to demonstrate the benefits of integrating terrestrial and marine planning systems due to the interdependence of land and offshore systems. 129 In this regard, MSP is considered as a sustainable and integrated management framework of human activities at land and sea. 130 Marine spatial planning has increasingly been identified as a solution to resolving tensions on the coasts and in the seas by enabling development whilst providing improved protection of the marine environment.¹³¹

Various countries, particularly in the densely used marine areas of Northwest Europe, are developing and applying MSP.¹³² Germany, the Netherlands, and Belgium, for example, have developed marine spatial plans for their territorial seas and exclusive economic zones.¹³³ Other countries are creating legislation or new policy frameworks that will enable MSP in the

128 P Crist and others, Integrated Land-Sea Planning: Technical Guide to the Integrated Land-Sea Planning Toolkit (EBM Tools Network 2009) < https://repositories.lib.utexas.edu/handle/2152/31894>. near future. The United Kingdom, for example, has passed a Marine and Coastal Access Act that aims at ensuring clean, healthy, safe, productive, and biologically diverse oceans and seas.¹³⁴ Enander *et al* state that MSP (referred to as marine planning in the UK) has been proposed as one of the tools to deliver the aims of the Marine and Coastal Access Act.¹³⁵

Marine spatial planning incorporates a public process of analysing and allocating the spatial and temporal distribution of human activities in coastal and marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process. ¹³⁶ It is a framework for achieving integration between different objectives, managing competing demands on the marine area, taking an ecosystem approach, enabling the coexistence of compatible activities wherever possible, and integrating with terrestrial planning. ¹³⁷ Through MSP, the maritime dimension of some coastal uses or activities and their impacts are integrated to provide a strategic vision for the land-sea interface. ¹³⁸

In addition, MSP plays a critical role in addressing the interdependency of land and offshore economic sectors and different interests including identification of conflicts and synergies, evaluation of trade-offs among multiple uses and interests, and proposing different development options.¹³⁹ It does this by bringing together multiple users of the land-sea interface – including tourism, energy, industry, government, conservation, and recreation – to make informed and coordinated decisions about how to use the resource sustainably.¹⁴⁰ In many cases, users

¹²⁹ Granit and others (n 1) 10-12; Kristina Veidemane and Olgerts Nikodemus, 'Coherence between Marine and Land Use Planning: Public Attitudes to Landscapes in the Context of Siting a Wind Park Along the Latvian Coast of the Baltic Sea' (2015) 58(6) Journal of Environmental Planning and Management 949; Hance D Smith and others, 'The Integration of Land and Marine Spatial Planning' (2011) 15 Journal of Coastal Conservation 291.

¹³⁰ Deidun and others (n 127) 136ff; Directive 2014/89/ EU of the European Parliament and of the Council of 23 July 2014 (n 127).

¹³¹ Anne-Michelle Slater, 'What is Marine Spatial Planning?' (2012) 14(1) Environmental Law Review 1.

¹³² Sue Kidd and Geraint Ellis, 'From the Land to Sea and Back Again? Using Terrestrial Planning to Understand the Process of Marine Spatial Planning' (2012) 14(1) Journal of Environmental Policy & Planning 49.

¹³³ ibid 49ff.

¹³⁴ Coastal and Marine Access Act 2009, s 1-325.

¹³⁵ G Enander and others, Better Management of the Marine Environment (Final report developed for the Swedish Government 2008).

¹³⁶ Nguyen Chu Hoi and Bui Thi Thu Hien, Integrated Spatial Planning and Management for Marine and Coastal Sustainability in Vietnam (International Union for Conservation of Nature and Natural Resources 2014) 5.
137 ibid 2 and 5-6.

¹³⁸ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 (n 127).

¹³⁹ Veidemane and Nikodemus (n 129) 949ff.

¹⁴⁰ Harris Heap and Whiteway Post, 'Application of Biophysical Information to support Australia's representative Marine Protected Area Program' (2008) 51(10) Ocean & Coastal Management 701.

have free access to marine resources, including space that leads to excessive overuse and eventual destruction of resources, necessitating regulation. 141

Therefore, there is a need to amend the Physical and Land Use Planning Act of 2019 to ensure that there are express provisions committing both the national and respective county governments to apply marine spatial planning as a framework for planning activities within the land-sea interface. The Act should be amended to include a clear definition of land, encompassing all water bodies as well as the territorial sea as provided in the Constitution of Kenya, 2010. 142 This will ensure that the law addresses itself to the unique spatial planning prerequisites of the land-sea interface, which include multiple and increasingly expanding and conflicting uses that transcend the land-sea interface continuum.

Thus, marine spatial planning should be provided for in the Act as one of the plan typologies that addresses the planning needs of Kenya's land-sea interface and the wider coastal marine ecosystem. The MSP framework for Kenya should facilitate integration across sectors, agencies, and levels of government. This can be achieved by designating the lead role in matters of planning and development control to a focal level of government. For example, the National Land Commission which is mandated with the administration of the land-sea interface by the Constitution should assume this role. 143

The National Land Commission should, therefore, be charged with the preparation of a marine spatial plan for the entire geographical stretch of Kenya's land-sea interface. This spatial plan would then provide the basis for approval of all proposed developments to be processed by the respective county governments. When it comes to development approvals based on the adopted marine spatial plan, the county governments should have a special committee that has representation from the National Land Commission and all the sector agencies as a part of

the evaluation team that would recommend the approval of a proposed development. Based on the comprehensive marine spatial plan, all counties within the coastal zone should also prepare specific county spatial plans which would give a detailed framework for governing the land-sea interface within their areas of jurisdiction. These marine spatial plans would ensure that the land-sea interface is effectively managed and a sustainable blue economy realized.

¹⁴¹ ibid 701ff.

¹⁴² The Constitution of Kenya 2010 art 260.

¹⁴³ ibid art 62(3).

