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Integrating environmental sustainability and social justice principles into South Africa's blue economy initiative: re-imagining the political economy of our ocean

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South Africa has vigorously embraced the concept of the blue economy. However, the scope, scale and impacts of South Africa's blue economy initiative, have raised significant concerns amongst local communities, NGOs and scholar activists in South Africa who are challenging South Africa's conceptualization of, and approach to "blue growth." This paper provides a critique of South Africa's approach to planning, developing and governing the ocean economy and argues that the principles of social justice and environmental sustainability have been sidelined in favor of pursuing rapid economic growth. The paper examines key issues in the literature, environmental assessment processes, various legal cases that deal with mining, oil and gas applications, as well as insights from participation in several workshops with small-scale coastal fishing communities where issues on the blue economy were explored. These issues are discussed in relation to the growing literature on inclusive governance and integration of social justice and equity principles as foundational for fostering a sustainable and equitable blue economy. We conclude with proposals for embedding environmental sustainability and social justice principles, in a co-created blue economy policy and governance framework for South Africa.

KEYWORDS

blue economy, ocean economy, justice, sustainability, governance, small-scale fishing communities, South Africa

1 Introduction

South Africa, like many countries across the world, has embraced the notion of the blue economy enthusiastically and is looking to its oceans as the "new economic frontier." With a coastline of over 3,000 kilometers and an Exclusive Economic Zone (EEZ) that covers 1.54 million square kilometers, the potential for fast-tracking large ocean-based development in the maritime sector to boost economic growth and address crippling unemployment has been strongly supported (Findlay, 2018; Potgieter, 2021; Republic of South Africa, 2014a, 2020). However, increasing understanding of the scope, scale and impacts of South Africa's blue economy initiative, locally referred to as "Operation Phakisa" (hereafter referred to as OP), has led several scholars and activists to challenge South Africa's conceptualization of, and approach to "blue growth" (Masie and Bond, 2018; Bond, 2019; Isaacs, 2019; Bond, 2023; Sowman et al., 2023).

The original international conceptualization of the blue economy as "marine-based economic development that leads to improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities" (UN, 2012), was orientated toward development that promotes socio-economic benefits for current and future generations, but within an ecological framework that protects and maintains biodiversity, core functions and intrinsic values of ocean ecosystems. This new economic arena, envisaged development that promotes clean technologies, renewable energies, circular material flows, and reduction in ocean waste that would create jobs and address poverty (Bennett et al., 2019b). In response to this call for sustainably developing ocean economies, governments worldwide have developed policies, programmes and plans, to meet their respective political and economic agendas in the ocean space.

South Africa is no exception and embarked on an intensive planning process to develop its blue economy initiative in 2014. While principles of integration, ocean protection and good governance were foundational to the planning phase, a review of the nature and scale of activities envisaged and implemented under OP, and the more recent process of developing an Ocean Economy Master Plan (OEMP) (DFFE, 2023), suggest that South Africa's blue economy programme has lost sight of the original UN inspired vision and intended outcomes. Over time, the terminology has also shifted from the "blue economy" to the "ocean economy,"¹ indicating South Africa's increasing focus on economic growth and sidelining of broader sustainability and social justice considerations.

Similar to the concept of sustainable development, the term "blue economy" and its various definitions, has universal appeal (Germond-Duret et al., 2023, p. 187). However, in practice, due to its wide and ambiguous interpretation, development of the blue economy has enabled "business as usual" (Voyer et al., 2018) and resulted in environmental and social injustices and conflicts (Barbesgaard, 2017; Childs and Hicks, 2019; Tafon, 2019; Österblom et al., 2020; Jentoft et al., 2022). In the context of South Africa, with an official unemployment rate of approximately 32%, and over half of the population (approximately 30.4 million people) living in poverty (STATS SA, 2024), developing the ocean economy is being vigorously promoted by government. Civil society, and coastal communities² in particular, are increasingly realizing the scale and scope of this new economic agenda and are expressing serious concerns about the impacts of "blue growth" on marine resources and areas, as well as coastal communities (Masie and Bond, 2018; Bond, 2019; Isaacs, 2019; Sunde, 2022; Sowman et al., 2023). Furthermore, there are increasingly worrying signs that the intended vision, and socio-economic and environmental benefits of growing the blue economy are in stark contrast to South Africa's progressive environmental and social justice principles enshrined in the South African Constitution (Republic of South Africa, 1996).

In particular, the focus on extractive industries such as offshore oil and gas, coastal and marine mining,³ as well as industrial aquaculture, shipping and port expansion suggests that economic growth imperatives are outweighing long-term sustainability considerations (Bond, 2023). The privatization, commodification and industrialization of the ocean environment reflects a mismatch between South Africa's OP programme and its commitments to various international environmental instruments and agreements including the Convention on Biological Diversity (CBD), recently adopted Kunming Montreal Global Biodiversity Framework (GBF) as well as the United Nations Paris Agreement to which South Africa is a signatory.

In this paper, we provide a critique of South Africa's blue economy initiative and associated processes and argue that the principles of social justice and environmental sustainability have been sidelined in favor of pursuing rapid economic growth. We examine the key issues arising in the literature, technical reports, comments and appeals on environmental assessments as well as various legal cases that deal with mining. In addition, we draw on the minutes of meetings and workshops with smallscale coastal fishing communities, small-scale fishers, government officials and NGOs where blue economy projects, programmes and plans have been discussed (see Table 1). Both formal minutes and personal notes were used to inform the analysis for this paper. We examine these issues in relation to the growing literature on inclusive governance and integration of social justice and equity principles as foundational for fostering a sustainable and equitable blue economy. We conclude with proposals for embedding environmental sustainability and social justice principles, in a co-created blue economy policy and governance framework for South Africa.

2 Critique of international perspectives on blue economy from a social justice and environmental sustainability perspective

At an international level, the blue economy is an emergent concept, one that is "traveling globally" but "localized differently" (Choi, 2017). Not only does the geospatial location of the blue economy shape its mapping on a specific territory, but as Winder and le Heron (2017) have articulated, different interests are influencing this emergence in diverse settings and in complex assemblages. The slippery, "fluid" nature of this concept and the resultant ambiguity that prevails is highlighted by a growing body of scholarship (Silver et al., 2015; Voyer et al., 2018; Childs and

¹ In the paper we use the terms "blue economy" and "ocean economy" interchangeably since this is common practice amongst stakeholders involved in these initiatives. We do however explain government's conscious decision to adopt the term "ocean economy" in preference to the "blue economy."

² We use the term "coastal communities" in this context to refer to marginalised, previously disadvantaged communities living adjacent to the coast, depending on the ocean and marine resources for their livelihoods. We acknowledge that they are not homogenous and there are many communities of interest within these groups but for the purpose of this paper we distinguish coastal communities from broader civil society groups that may also have interests in ocean and coastal issues.

³ Despite the rapid expansion of South Africa's coastal and marine mining sector, it has only recently been identified by government as a sector that requires inclusion in the OEMP and MSP processes.

Event	Online or location	Date	No participants*
Provincial workshop with SSFs on Impacts of the BE organized by Masifundise Development Trust and Coastal Links	KZN E Cape	15 Nov 2017 21 Nov 2017	45 100
National SSFs workshop organized by Masifundise Development Trust	Online	12–16 April 2021	100
National Strategy Workshop organized by One Ocean Hub ELRU, Rhodes University and Coastal Justice Network	Port Alfred, E Cape	5–7 July 2022	80
National Strategic Forum of SSFs organized by Masifundise Development Trust	Paarl, Western Cape	2–3 Nov 2022	60
Oil and Gas National Strategy Workshop, organized by SDCEA andUrban Futures, DUT	Durban	2–3 Feb 2022	50
Oil and Gas National Strategy Workshop, organized by Green Connection	Saldanha Bay	25–26 Sept 2022	50
Regional Workshop for SSFs, West Coast, South Africa organized by One Ocean Hub UCT EGS	Velddrif, Western Cape	29–30 March 2023	30
National SSFs Workshop Organized by One Ocean Hub Coastal Justice Network	Gqeberha	25–26 October 2023	55

TABLE 1 National and regional workshops with SSFs that dealt with blue economy issues.

*Some of these figures are estimates.

Hicks, 2019; Eikeset et al., 2018; Bennett et al., 2019a,b; Cohen et al., 2019; Ertör and Hadjimichael, 2020; Bennett et al., 2021; Bennett, 2022; Jentoft et al., 2022). The ways in which the term is being co-opted in competing and often very contradictory ways is increasingly being exposed in both peer-reviewed literature as well as in a range of publications emerging from international panels, non-governmental organizations and various Peoples' Tribunals (Coastal Links and Masifundise Development Trust, 2018; le Fleur et al., 2023; Österblom et al., 2020; Gerhardinger et al., 2022; Louey, 2022).

In its embryonic conceptual state articulated through the United Nations Rio+ 30 Agenda in 2012, blue economy sheltered in the generally ambiguous waters of "sustainable development" and superficially economic growth gains appeared to mix freely with environmental sustainability and social development. However, several critiques argue that its interpretation is increasingly entwined with neo-liberal, global capitalist and post-industrial expressions of economic development, revealing its strong Blue Growth agenda (Bennett et al., 2019b, 2021; Cohen et al., 2019; Childs and Hicks, 2019; Ertör and Hadjimichael, 2020; Germond-Duret et al., 2023). A growing political ecology scholarship identifies the ocean as a new "eco-capitalist space" where statecorporate interests are colliding in the search for new naturebased products for insatiable neo-liberal global markets (Satgar, 2018; Childs and Hicks, 2019). This turn to the blue economy at international level is seen as following in the footsteps of the green economy, with its associated contradictory strategies and means of achieving its goals.

Whilst some scholars see the dominant narrative emerging as one of capitalism and resource nationalism pushing for new frontiers for economic growth, competing with the environmental sustainability narrative of threatened nature, others argue a convergence of these economic and environmental conservation interests, a continuity some social justice activists have argued has long been in place in some contexts in the form of "ocean grabbing" (Barbesgaard, 2017; Bavinck et al., 2017; Cohen et al., 2019). The findings of the High-level Panel for a Sustainable Oceans Economy (Österblom et al., 2020), provide an assessment of inequities in the ocean economy and how environmental and social harms are borne by the most vulnerable groups. In setting out opportunities for action to achieve equity in the ocean economy, they specifically refer to the need to recognize the rights and needs of various vulnerable groups including small-scale fishers, indigenous and minority groups and women and to "recognize, protect and operationalise equity and access rights" (page 26). Various scholars have identified the importance of attention to recognitional, procedural and distributive components of social justice and equity in the context of the blue economy (Bennett et al., 2019a; Österblom et al., 2020; Bennett et al., 2021) while others refer to centering "blue justice" as a core blue economy governance principle (Jentoft et al., 2022).

Increasingly, attention is focusing on ocean governance as a key factor in determining the social justice and environmental sustainability outcomes of blue growth (Bennett et al., 2019a; Jentoft et al., 2022). Bennett et al. (2019b) identify 5 priorities required for sustainable and just ocean outcomes, namely: sustainability and equity principles must be explicitly prioritized in policy instruments at international, regional, and national scale; comprehensive legislation and effective regulatory mechanisms must be in place that enable coherent, inter-sectoral sciencebased planning and management; national requirements for equity, benefit-sharing, and social responsibility must be developed; the establishment of mechanisms for ensuring inclusive governance and participation of civil society stakeholders including marginalized groups in environmental decision-making is imperative; and, insights from interdisciplinary ocean science at all scales is required to catalyze an equitable and sustainable blue economy (Bennett et al., 2019b, p. 3).

In the South African context, academics and activists have long argued the need to integrate social justice and equity considerations in fisheries and marine governance (Sunde and Isaacs, 2008; Sowman and Sunde, 2018; Sunde, 2022; Muhl and Sowman, 2020). This call has been reframed in the context of OP blue economy by Isaacs (2019) who has called for "Blue Justice," urging for greater attention to issues of equity, access, participation and rights (Isaacs, 2019). The term "Blue Justice" which was adopted at the 3rd World Small-Scale Fisheries Congress in Thailand in 2018, has gained considerable attention in the international arena and various scholars, community-based organizations and high-level panels are interrogating blue economy policies, strategies, plans and practices, using this lens (Bennett et al., 2019a,b; Bennett, 2022; Gerhardinger et al., 2022; Jentoft et al., 2022; Blythe et al., 2023).

Our conceptual framework for this paper draws on the above international scholarship examining the environmental and social justice dimensions of Operation Phakisa and its more recent OEMP process in South Africa. We agree that the blue economy should "promote economic benefits of 'good for the ocean' industries and activities, while ensuring truly sustainable development" (Spalding, 2016, p. 14) which centers rights and socio-economic needs of ocean dependent peoples as inextricably in-twined with ecological justice. However, sustainable development is a highly contested concept, and, like other scholars, we acknowledge that the term is "ontologically open" and "inherently political," and also possesses a history of bias toward economic growth (Purvis et al., 2019, p. 692). South Africa has embraced the concept of sustainable development in terms of its umbrella environmental legislation, the National Environmental Management Act (NEMA) 1998 (Republic of South Africa, 1998) and identifies environmental sustainability, equity and social justice as core principles. Social justice within the South African context requires a commitment to addressing the injustices of the past (restoration of land and resource rights), improving human wellbeing (access to education, healthcare, and resources) and sustainability (resource sustainability, ecosystem restoration) (Swilling et al., 2015; Murcott, 2017, 2023). More recently, the understanding and application of the concept of intergenerational equity in the context of ocean resource extraction has been highlighted, (Bond, 2023). Consequently, this paper explores to what extent South Africa's approach to the blue economy is upholding these principles.

3 South Africa's blue economy initiative

South Africa's blue economy initiative, "Operation Phakisa" (which means "Hurry up" in Sesotho, hereafter OP) was launched by former President Zuma in 2014 after his visit to Malaysia and exposure to their "Big Fast Results" methodology, which aims to promote rapid economic development in the ocean space (Zuma, 2014). This programme envisaged capitalizing on the country's vast and significant maritime area and resources, to deliver "fast" socio-economic benefits and address issues such as poverty, unemployment and inequality (van Wyk, 2015; Potgieter, 2021), as emphasized in the country's National Development Plan 2030 (Republic of South Africa, 2020). Initial estimations envisaged over a million jobs would be created and up to R 177 billion would be contributed to the country's GDP by 2033 (Republic of South Africa, 2014a). South Africa's OP was launched in 2014, and has been variously referred to as an initiative, a programme, a strategy and a methodology.

To kick start the process, an intensive planning process, referred to as the OP Oceans Economy laboratory or Oceans Economy Lab, as it became known, was launched in August 2014 (Republic of South Africa, 2020). Participants in this "lab" included selected scientists, key actors in the oil and gas, marine shipping and transport industries, ports and harbors as well as members of a few environmental non-governmental organizations (NGO) and officials from relevant government departments. There is no public record of what was discussed behind these closed doors and what is noteworthy is that participants had to sign a non-disclosure agreement. Furthermore, there were no representatives from civil society organizations or coastal communities present.

The "Oceans Economy Lab" initially focused on four "workstreams," namely; marine transport and manufacturing, offshore oil and gas exploration, aquaculture, and marine protection services and ocean governance, but later, coastal and marine tourism, and small harbor development, were added to the sectors being targeted for growth (Findlay, 2018; Republic of South Africa, 2020). Fisheries, mining and renewable energy, were notably absent from this initial phase of the programme.

At the time of Operation Phakisa's conception, the State identified the need for an integrated approach to ocean governance that can better coordinate the relevant sectors involved (Republic of South Africa, 2014a, p. 6). Furthermore, the Marine Protection Services and Governance workstream identified the need for an overarching integrated ocean governance framework for sustainable ocean development. This proposal resonated with the vision of the recently gazetted White Paper on the National Environmental Management of the Ocean in 2014 (NEMO), a policy which sought to provide an overarching framework for governance of activities in the ocean and ensure optimal and sustainable use of ocean resources. However, once OP was launched, this White Paper was never given legal effect. Sources within the then Department of Environmental Affairs (DEA) suggested that political heads were concerned that the economic aspirations of OP may be impeded by NEMO which had a strong environmental focus and thus NEMO was not pursued. Instead, government began formulating a Marine Spatial Planning Bill that would ostensibly provide the legislative framework for South Africa's blue economy initiative and would enable the balance required by Section 24 of the Constitution, namely to achieve "ecologically sustainable development." During the period 2015-2017, a Marine Spatial Planning (MSP) Bill was developed and gazetted for comment in 2017. While the MSP Act was promulgated in 2018, it was only finally given legal effect in April 2021.

At about the same time, there was also considerable debate within DAFF (now DFFE)⁴ and amongst selected stakeholders

⁴ In 2019, the Department of Agriculture, Forestry and Fisheries was restructured, and agriculture was incorporated into land reform and rural

regarding the terminology that would best capture South Africa's approach to the blue economy. The term "ocean economy" was adopted by the department, confirming the government's progrowth position focused on accelerating economic development and exploiting ocean resources. Principles of sustainability and social equity were no longer central to progress reports, press releases, strategies and plans emanating from government (Vreÿ, 2019).

While initial reports of progress with regard to OP were promising, showing a boost to the economy of about R17 billion in public and private sector investment (Republic of South Africa, 2018), and good progress in terms of maritime skills development, figures for job creation and contribution to GDP were well below targets set (Vreÿ, 2019; Potgieter, 2021). Political instability, state capture, declines in foreign direct investment, slowdown in global trade, weakening of the SA currency, all exacerbated by the global economic downturn and disruptions associated with the Covid pandemic period, have meant that OP targets have not been met (Potgieter, 2021; DFFE, 2023). However, renewed momentum to develop the ocean economy was provided through the governments "Reimagined Industrial Strategy for South Africa" approved by the President in June 2019 (Republic of South Africa, 2019). This Strategy focused on revitalizing South Africa's economy through development of Master Plans for 15 priority sectors, including the ocean economy. Once again, a government-led fast paced planning process was set in motion to develop an Ocean Economy Master Plan which was based on the pillars of Operation Phakisa. However, these plans were severely curtailed by the Covid pandemic.

Despite inadequacies in the public consultation process, and limited input from coastal communities, the South African Oceans Economy Master Plan to 2035 (DFFE, 2023), was submitted to the Minister of Fisheries, Forestry and the Environment in March 2023, for approval. However, to complicate matters, no sooner had the OEMP been submitted to the Minister, than a series of Sector Plans (some different from the Sector Plans developed as part of the OEMP process) was gazetted in terms of the MSP Act for public comment. In terms of the MSPA, it states that the sector priorities will be negotiated until a set of ocean zones with management regulations are agreed to by all sector stakeholders and gazetted. There is little guidance in the Act regarding how these agreements will be reached, who will be at the table, or how these trade-offs will be made.

As civil society became more aware of governments plans and proposals to develop the ocean economy, and observed the weak public participation processes and lack of any meaningful response to civil society concerns regarding process and impacts, there has been increasing resistance to South Africa's approach to the blue economy. Civil society has become more organized and vociferous in their demands that government honor its international environmental and social justice commitments, its Constitutional obligations and the principles contained in NEMA. Small-scale fishing communities have been at the forefront of these actions, through protest action, social media statements, letters to the relevant Ministers, and legal action (Coastal Justice Network, 2022; Pereira and Erwin, 2023; Masifundise Development Trust, 2023).

4 Key issues and concerns regarding development of the ocean economy in South Africa

In this section, we present some of the key issues emerging from our review of the literature and other written sources as well as first-hand engagement with coastal communities at public meetings and workshops organized by NGOs and researchers to discuss the impacts and implications of South Africa's approach to the blue economy.

4.1 Process concerns—inadequate public participation at the policy, plan and project levels

Failure to involve the public in the conceptualization, planning and decision-making processes associated with South Africa's blue economy programme from the outset has raised significant concerns amongst a wide range of civil society organizations (CSO), coastal communities and researchers.⁵ This issue was raised in all the workshops and meetings where the authors were present (see Table 1). Those invited to participate in the original OP Ocean Economy Lab comprised a small group of hand-picked conservation agencies and NGOs. Representatives of indigenous peoples and local communities who depend on the ocean for their food and livelihoods were not invited to the Lab. The participants were overwhelmingly drawn from the natural sciences. Social scientists, who had done extensive work on coastal, fisheries and ocean governance, and social justice, were largely excluded. The planning was done behind closed doors and there was no process of public consultation on the planned goals, implementation plans, and outcomes. Below we highlight examples of inadequate public participation in various policy, law and planning development processes as well as at the project level.

4.1.1 The Ocean Economy Master Planning process

Lack of involvement of civil society in these critical discussions has continued as other high-level policy, law-making and planning processes such as the Ocean Economy Master Plan (OEMP), and Marine Spatial Planning Act (MSP) (Republic of South Africa, 2018) and Upstream Petroleum Resources Development Bill (UPRDB) (Republic of South Africa, 2021) unfolded. In the case of the OEMP process, very few representatives from coastal

development while fisheries was added to the environmental portfolio, becoming the Department of Forestry, Fisheries and the Environment (DFFE).

⁵ The following organizations have made submissions through a variety of formal channels and social media, Centre for Environmental Rights, SDCEA, Coastal Links and Masifundise Development Trust, Legal Resources Centre, Coastal Justice Network of One Ocean Hub (OOH); Green Connection, and Natural Justice. Please refer to their websites for newsletters and blogs on this topic.

communities were able to access these online meetings. While a Wild Capture Fisheries Working Group was set up to gather, analyze and present information on both the commercial and small-scale fisheries (SSF) sectors for the OEMP, small-scale fishers were largely unaware of these meetings. A few fisher leaders, NGOs and researchers who attended these online meetings continued to raise the issue of lack of representation and involvement of SSFs in the process. After much criticism of the lack of local community involvement in the OEMP process, DFFE organized a roadshow to provide information to SSFs on the OEMP as well as the MSP and Marine Protected Area (MPA) planning processes, in three of the four coastal provinces during August 2022. However, fishers and other community members attending these roadshows reported that the event was an information giving session, with little time for questions or discussion. There was certainly no opportunity to gather information and deepen understanding of the rights, needs and priorities of SSFs or gain meaningful input for the Wild Fisheries Sector Plan. Since the roadshows, there has been no further engagement with civil society on the status of the OEMP (DFFE, 2023), how it aligns with the MSP process, and there remains much confusion regarding the process going forward and implications for communities that depend on the ocean for food and livelihoods.

4.1.2 The Upstream Petroleum Resources Development Bill

Two pieces of legislation that have far reaching implications for how blue growth will unfold in South Africa are the Upstream Petroleum Resources Development Bill (UPRDB) (Republic of South Africa, 2021), and the MSP Act (Republic of South Africa, 2018). The process of developing the UPRDB, which aims to provide an enabling environment to fast track the exploration and production of oil and gas, has also come under heavy criticism from civil society organizations for the short time period allowed for meaningful public consultation especially amongst historically disadvantaged communities (Green Connection, 2024) and the inadequacy of consultation provisions provided in the Bill itself. The DMR has attempted to fast-track the development of this Bill by hosting a series of online consultations with stakeholders during the COVID-19 State of Disaster lockdown. Various substantive concerns were also raised in particular the lack of alignment with South Africa's climate change commitments, the absence of mechanisms to address the impacts of extraction on local communities and the State's failure to adequately consider the intergenerational constitutional right to an environment that is not harmful to human health or wellbeing (Green Connection, 2024). This Bill was passed by the National Assembly in 2023 and by the National Council of Provinces in March 2024.

4.1.3 Marine spatial planning framework and MSP act

In 2016 a Draft MSP Bill was published for comment and several months after this, a Draft Marine Spatial Planning Framework was gazetted for public input. This Framework was described as "the national guide for Marine Spatial Planning in South Africa's ocean territory" and providing "high-level direction" for the allocation of space in the marine environment. The Framework identified the seven principles that would underpin MSP in South Africa including sustainable development, spatial efficiency, cooperative, and transparent governance, justice, equity and transformation, ecological integrity, the precautionary approach, and adaptability (Republic of South Africa, 2017). Various CSOs and NGOs' raised a number of procedural justice concerns in relation to the legislative process associated with the promulgation of the MSP Act. The public participation process for providing input to the Draft Bill in 2016-2017, especially for coastal communities, was considered inadequate and the diversity of interests and rights in the ocean was not appreciated. In addition, some organizations raised substantive concerns regarding the content of the Bill in its weakening of environmental legislation, lack of over-sight mechanisms, the absence of an appeal process and the failure to give clarity to the position on existing mining rights in the ocean.

Although the MSP Framework was finalized and gazetted in 2017, the issue of how justice, equity and transformation would be operationalized did not receive further attention in the finalization of the MSP Bill. The lack of synergy between the text that was finally adopted for the MSP Act and the MSP Framework is glaring. Notably, the MSP Act removed the term "justice" and failed to identify and operationalize several of the key principles presented in the MSP Framework such as "justice," "equity," and "transformation" (Republic of South Africa, 2018).

Coastal communities in both the Eastern Cape and KwaZulu Natal hosted policy roundtables with the relevant officials from Operation Phakisa Ocean Secretariat, where they specifically raised concerns regarding the failure of the process to address the restitution of their rights as traditional, small-scale fishers (Masifundise Development Trust, 2017; Coastal Links and Masifundise Development Trust, 2018). During extensive discussions on the MSP Bill in Parliament in 2017 CSOs, together with members of the Portfolio Committee expressed strong concerns that there was no over-arching governance framework for the ocean economy nor was there an institutional mechanism for civil society to participate in the MSP process (PMG, 2017a,b). Without meaningful consultation experts argued that the legitimacy of the outcomes would be undermined (PMG, 2017a,b). Despite these concerns raised by civil society, few changes were made to the MSP Act which was promulgated in 2019 and eventually given legal effect in April 2021.

Until recently the MSP process and its various supporting technical documents, including the National Data and Information Report for Marine Spatial Planning (DFFE, 2021) have not been accessible to coastal communities. While engagements with key sectors such as commercial fisheries, aquaculture and oil and gas, have been ongoing and informed the baseline report and maps for the MSP process, engagement with civil society and coastal communities has been limited.

4.1.4 Off-shore oil and gas mining applications

Since Total's successful 2019 "Brulpadda" gas discovery in the country's Outeniqua Basin, and the more recent oil and gas discoveries off the Namibian and South African west coast,

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several international corporations have turned their attention to Southern Africa as the new oil and gas frontier. South Africa's economic and energy crises, as well as global-market pressures and weakening environmental governance regime have contributed to the rapid growth of this sector. The rapid increase in applications and approvals in this sector has led to growing opposition from coastal communities, NGOs, civil society organizations (CSOs) and academics across the country (Masie and Bond, 2018; Bond, 2019; Sunde, 2022; Green Connection, 2023; Sowman et al., 2023; Solomon, 2023). Aside from the many concerns regarding the government's focus on oil and gas as a growth sector,⁶ a key concern of coastal communities has been the failure to recognize their rights, interests and concerns in the assessment and decision processes leading to project authorizations. Several applications in this sector have overlooked small-scale fishing communities as an interested and affected sector and failed to consult them based on the assumption that offshore oil and gas development would not be of interest to them or affect their rights. This lack of recognition has resulted in numerous objections during the many EIA processes, appeals to the Minister of the Environment, and applications for an urgent interim interdict and two landmark judgements (Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others, 2022; Adams and others vs. Minister of Mineral Resources and Energy and others, 2022).

These two cases, brought by civil society with support from their social partners, argued that Shell and Searcher had failed to consult coastal communities' who rely on the ocean for their food and livelihoods, and have a deep cultural connection to the ocean, and had not conducted adequate environmental assessments (Sunde, 2022). In both cases, the High Court (in Makhanda and then in Cape Town) ruled that the seismic surveys could not proceed on the grounds of lack of consultation with coastal communities, and failure to consider various environmental, including climate, social and cultural impacts associated with seismic surveys (Sunde, 2022; Solomon, 2023; Murcott, 2023). In the case of Shell, the judge ruled that the decision to grant authorization was unlawful, was procedurally unfair and failed to consider the communities' spiritual and cultural rights. Shell and the Minister of Minerals and Energy appealed this ruling and on 3 June 2024 the Supreme Court of Appeal dismissed their appeal, confirming the High Court ruling but granted Shell the right to renew their exploration right on condition it included a proper public participation process. In the case of Searcher, the Cape High Court similarly ruled that the applicants had not recognized the rights of communities to fair and meaningful consultation and had failed to consider the importance of fish, in terms of their food and cultural rights. An interdict was granted and Searcher's bid to commence a seismic survey was stopped.

4.1.5 Expansion of the marine protected area network

The OP Marine Protection and Governance Lab took a decision in 2014 to pursue the expansion of South Africa's MPA network as a "quick win" (Operation Phakisa, 2014) in order to contribute toward achieving the international commitment made in the context of the CBD Aichi Targets. The selection of areas for this expansion drew on a set of prior systematic conservation planning processes (Sink et al., 2012). Whilst the offshore process had involved extensive consultation with a range of industry stakeholders (Sink et al., 2023), consultation with Indigenous Peoples and local communities did not take place. A set of 22 draft regulations for the new MPAs, with complex, very detailed zonation plans and GPS points was released in English electronically via the Government Gazette for public comment in 2016 (Republic of South Africa, 2016). Copies of these proposed plans were not made available to poor, rural fishers, some of whom would be directly impacted by these plans. Very limited public participation was facilitated and despite the fact that 11 of these proposed MPAs were contiguous to the coast and would impact small-scale fishers, some with customary fishing rights, only one set of these MPA regulations included an assessment of the impact of the proposed zonation on fishers. Despite submissions from researchers, NGOs and communities expressing concerns regarding the lack of recognition and integration of fishers' local ecological knowledge in the planning processes, as well as the unfair and inadequate public participation processes, 20 MPAs were gazetted in 2018.

The expansion of the MPA network, raised considerable concern amongst SSF communities and their social partners and further alienated local resource dependent communities from these conservation initiatives. In line with South Africa's international commitments to have 30% of its coastal and marine environment under some level of protection by 2030, the need to meaningfully involve coastal communities in these processes has now been acknowledged by some conservation planners. As marine scientists become aware of the impacts of MPAs on coastal communities, and as relationships between social scientists and conservation planners have strengthened,⁷ greater emphasis is being placed on improving public participation processes and incorporating local and Indigenous knowledge in further conservation planning and MPA initiatives.

4.2 Concerns over the adequacy of environmental assessment procedures for ocean developments

South Africa has a relatively comprehensive policy and regulatory framework for Environmental Assessment and

⁶ Various coastal communities, with support from their social partners, as well as NGOs and CSO's have submitted numerous comments and lodged appeals against seismic surveys, and various oil and gas exploration applications. These responses are too numerous to reference. The reader is thus directed to the websites of the main NGOs and CCOs involved in these objections and appeals (Green Connection, Legal Resources Centre, Natural Justice, Oceans not Oil and All Rise Attorneys).

⁷ This improved collaboration has been facilitated through a 5-year interdisciplinary, multi-institutional project referred to as One Ocean Hub and has provided an opportunity for working collaboratively across disciplines and communities, to better understand different perspectives, and recognise rights, value local and indigenous knowledge and explore mechanisms for inclusion into conservation planning and MSP processes.

Management (Glazewski and du Toit, 2013). However, concerns exist over the limitations of these tools including the ad hoc, technocratic and science-based approach to environmental assessment in South Africa, the lack of meaningful public participation, weak monitoring and follow-up as well as the failure to assess the cumulative impacts of projects particularly in the context of climate change (Wilkins, 2003; Retief, 2010; Simpson and Basta, 2018). In the context of the ocean economy, a major concern is that EIA, and its associated list of activities that determine which activities are subjected to environmental assessment, has not been designed for assessment of projects in a complex, dynamic and changing ocean environment. Assessing the nature, extent and severity of environmental impacts and the potential cumulative effects, especially in the context of climate change, is much more speculative in such a dynamic, unexplored and unknown environment. While assessment of cumulative impacts is required at the project level in terms of South Africa's EIA regulations, methods for undertaking such assessments are not well developed in SA nor are they routinely undertaken (Garrido-Mirapeix, 2023). Thus, the current assessment and decision-making processes focus on applications and their impacts on a project-by-project basis, and do not take adequate account of past, and future planned activities that could affect the environment, and communities dependent on these environments. This represents a major inadequacy in the environmental assessment and management processes for coastal and ocean projects in South Africa.

The urgency to facilitate OP implementation and remove legal and institutional barriers and streamline the approvals process, was supported by the introduction of the One Environmental System (OES) for mining in South Africa in December 2014. The OES system was introduced to replace the fragmented and onerous process of obtaining environmental and mining authorization under various pieces of legislation and sought to bring them together into a single decision-making process.⁸ While the DMRE is the decision-making authority and has the power to grant environmental approvals, environmental assessment and management must follow NEMA requirements, including the undertaking of some level of environmental assessment in terms of the EIA regulations (Republic of South Africa, 2014b). Appeals against decisions are directed to the Minister of Forestry, Fisheries and the Environment, who has the power to overturn or uphold a decision made by DMRE. These legislative amendments were designed to streamline the assessment and approvals process, speed up decision-making and fast-track development.

Despite the precautionary principle embedded in NEMA, and in the MSP Act, there is little evidence of adopting this principle in conditions attached to the granting of licenses and approvals for coastal mining, oil and gas exploration and other large-scale developments (Centre for Environmental Rights vs. Minister of Environment and Others, 2020; Adams and others vs. Minister of Mineral Resources and Energy and others, 2022). Furthermore, there is evidence that the Minister of the Environment is ignoring her own scientists when reviewing appeals for prospecting and mining rights within coastal systems for example permitting mining in areas declared as critical biodiversity areas (Centre for

Environmental Rights vs. Minister of Environment and Others, 2020).

While prospective investors or developers must apply for a right and obtain environmental authorization to proceed with most blue economy projects, the many appeals and legal challenges launched over inadequate public participation, and failure to properly assess environmental and social impacts, including cumulative impacts, highlights inadequacies in the environmental assessment, and authorization process in South Africa.

4.3 Lack of transparency and accountability in decision-making processes

Many decisions that have far-reaching impacts and implications for the environment and communities, have been taken without proper consultation and with limited information. We have already described the limited input of marine social scientists and civil society actors in the policies, plans and legislative processes associated with OP. Major decisions regarding for example, the allocation of 98% of the EEZ for oil and gas exploration, and governments' active support to grow this sector, despite the South African government's commitment to reduce carbon emissions and expand South Africa's MPA network to 30% by 2030 (DFFE, 2023), are contradictory and raise questions about the agendas and motivations of decision-makers. Furthermore, information on several blue economy projects, but in particular those authorized by the DMRE such as oil and gas exploration and production rights granted, is not easily available and even formal requests for information through the PAIA (Promotion of Access to Information Act) process are not forthcoming or the response is very slow. In some cases, it is only through litigation that information that should be available to the public is accessed.

Holding government to account in terms of its international climate change commitments, Constitutional principles such as inter-generational equity and environmental legislation in particular the NEMA principles (Section 2) which apply to all organs of state, and private sector actors, has forced civil society, in partnership with coastal communities, to resort to protest action and the courts, to challenge decisions.

4.4 Environmental and social costs of South Africa's blue economy initiative

South Africa's focus on the oceans as the new economic frontier has also led to rapid escalation of applications for oil and gas exploration, large-scale infrastructure projects such as port expansions (Durban and Richards Bay), new port developments, and marine -based energy infrastructure including karpowerships, as well as for coastal and marine prospecting and mining. Authorization of these projects, without proper environmental accounting or a strategic environmental planning framework to guide decision-making has raised concerns amongst scholars and NGOs and has led to widespread protest action by coastal communities and various legal challenges (Masie and Bond, 2018;

⁸ See Humby, 2015 for details of the various Amendments introduced.

Bond, 2019; Sunde, 2022; Green Connection, 2023; Solomon, 2023).

Environmental impacts associated with these industries have been documented in various Environmental Impact Assessment reports, technical reports and expert witness statements. The potential environmental damage associated with oil and gas exploration including the impacts on marine fauna, from emissions, discharges, and seismic and multi-beam bathymetry noise, have raised significant concerns (Singh et al., 2022). Both the Shell and Searcher cases (see Section 4.1.5 above) as well as the recently launched legal case by two NGOs (Green Connection and Natural Justice vs. Minister of Mineral Resources and Energy and others, 2024), refer to the significant environmental impacts that could result on marine fauna and ecology, fisheries, coastal environments and users, as well as to intangible cultural heritage. In addition, the risks associated with a blow-out occurring would be devastating and have also not been adequately assessed. These cases also highlight the failure of complying with South Africa's global climate change commitments should these proposals proceed.

Other impacts associated with these extractive industries and large-scale infrastructure developments, include degradation of coastal and marine habitats, biodiversity loss, impacts on scarce water resources, increased pollution, loss of coastal access, restrictions on access to fishing grounds, as well as impacts on cultural heritage, fisheries, and nature-based tourism. These environmental impacts affect coastal communities and undermine their rights to food, to work and to practice their culture.

While South Africa has embraced the UN and CBD global biodiversity targets, including the more recent Global Biodiversity Framework targets to increase MPAs to 30% of its continental EEZ by 2030, we argue that having marine protection as a separate pillar is contrary to principles of environmental integration, co-ordination across sectors and efforts to mainstream biodiversity and environmental conservation into all planning and decision-making processes. This lack of attention to environmental and biodiversity considerations is evident in the various sector plans developed as part of the OEMP (DFFE, 2023) and the various MSP sector plans (DFFE, 2023) which paid scant attention to environmental considerations including climate change.

While an MSP process is underway in South Africa, with a goal of developing four marine area plans for South Africa's EEZ by the end of 2027, the ongoing approval of large-scale development projects undermines the process of developing a marine plan that recognizes areas of conservation value as well as the rights of all ocean users, their needs and priorities. So while the expansion of the MPA estate contributes to South Africa's conservation targets, a network of MPAs cannot offset the environmental damage anticipated from an aggressive blue economy strategy (Lagabrielle et al., 2018; Lombard et al., 2019). With so much of the ocean and coastal areas already allocated to prospecting and exploration prior to the development of the MSP plans, we argue that government as custodian of the marine environment has not been able to ensure that principles of environmental and social justice, have been respected and upheld in planning and decision-making.

5 Discussion

5.1 Different conceptualizations of blue growth in SA

From the outset the government has conceptualized its blue economy strategy in terms of its ability to "unlock the economic potential" of the country's oceans (Republic of South Africa, 2014a). Furthermore, many in government have applauded the economic and social transformation potential of "Blue Growth" in the country including the current President, Cyril Ramaphosa, who recognized the oceans as a priority growth sector in the countries Reimagined Industrial Strategy of 2019. The Minister of Mineral Resources and Energy, Gwede Mantashe, has been a fierce protagonist of the ocean economy, claiming job creation and skills development, and more recently stating that the exploitation oil and gas alone could boost South Africa's GDP by 8% (Steyn, 2023).

However, many scholars and activists describe how Operation Phakisa stems from an "extractivist mind-set" (Bond, 2019, p. 349), where "ocean resources were essentially seen as commodities" (Potgieter, 2021, p. 131) based upon a strategy for "a new spatial fix for capital accumulation" (Satgar, 2018, p. 24). Many scholars have expressed concern that transitioning to an ocean economy, and Operation Phakisa in particular, specifically prioritizes economic development while overlooking environmental threats and social harms (Masie and Bond, 2018; Potgieter, 2018, 2021; Bond, 2019; Isaacs, 2019; Sowman et al., 2023).

A key environmental concern relates to climate change and contradictions in policy commitments and rhetoric of politicians who claim that South Africa can meet its global climate commitments while pursuing an aggressive oil and gas growth strategy. When launching OP former President Zuma stated that "Our economy will become resilient to the possible effects of climate change only when we take bold steps like the reduction of emission of carbon dioxide and other gases that lead to increasing global temperatures" (Sunday Times, 2014) and as recently as July 2023, the Minister of Forestry, Fisheries and the Environment, Barbara Creecy, reaffirmed South Africa's commitment to addressing climate change challenges at the G20 Environment and Climate Sustainability Ministerial meeting in India. There is thus a "glaring contradiction" in the country's blue economy goal of, "capital accumulation through shipping, coal, oil and gas on the one hand, and the promise to 'build the biggest mitigation buffer' on the other..." (Masie and Bond, 2018, p. 320).

Furthermore, concerns have been raised over both the project's inequality, and lack of long-term economic sustainability, mainly providing short-term gains for "multinational corporations (in oil and shipping), political oligarchs and well-connected entrepreneurs" (Masie and Bond, 2018, p. 315). Estimates of boosting the GDP significantly and providing up to 1 million jobs, have not materialized (Potgieter, 2021). Poor coastal communities have protested the State's failure to adequately consult them, for failing to respect their customary and cultural rights and for promising them false trade-offs in the form of employment opportunities in highly skilled, technical jobs for which they know they will not qualify.

Clearly, for coastal communities the way OP is being interpreted and implemented in South Africa is at odds with their conceptualization of what constitutes a sustainable ocean economy. For many coastal communities in South Africa, the ocean is simultaneously a source of food, a means of livelihood and the material basis of their culture. Their identity and culture are intertwined with the oceans-from the deep sea to the coastal shores. The ocean is regarded as a sacred space, a place where the ancestors reside, it's a place of healing, spiritual renewal, ritual and of cultural practice (Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others, 2022; Solomon, 2023). Thus, communities' opposition to extractive industries and large-scale infrastructural projects is not only concerned with environmental degradation and implications for food and livelihoods but also with protecting their intangible cultural heritage. In contrast with the state and investors, their conceptualization of the ocean economy is integrally tied up with their cultural relationship to the ocean, and their role as ocean defenders (Pereira and Erwin, 2023). Their understanding of the ocean economy is more aligned with the original conceptualization of the blue economy that aimed to improve human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities. These contrasting worldviews and interpretations of the blue economy, highlight a clash of values and principles at the highest order of governance (Jentoft et al., 2022; Germond-Duret et al., 2023).

5.2 Developing an inclusive, environmentally sustainable and socially just governance framework for the ocean economy

Despite a progressive Constitution that recognizes a right to a clean and healthy environment as well as a range of interdependent fundamental human rights (see Section 2 of the Constitution, Republic of South Africa, 1996), it would appear as though government has lost sight of the core principles of environmental and social justice in ocean economy planning, decision-making and implementation. Coastal communities are being further marginalized and squeezed out of coastal and marine spaces through ocean economy plans and projects that promise jobs, skills development and better socio-economic conditions. These findings resonate with various academic critiques of the blue economy in the context of coastal communities as well as increasing empirical case study evidence from across the world (Bennett et al., 2019b, 2021; Jentoft et al., 2022; Blythe et al., 2023; Evans et al., 2023; Gerhardinger et al., 2022; Sowman et al., 2023). Embedding social and environmental justice principles into South Africa's ocean economy governance processes and decision-making and recognizing the intersectionality of these rights is necessary to uphold Constitutional requirements as well as various national and international policy commitments (Murcott, 2023).

Drawing on Bennett et al. (2019b) priorities for a sustainable and just ocean economy, we argue that South Africa needs to develop a national policy and legislation for the ocean economy and its governance, guided by inclusive and participatory processes, and underpinned by environmental and social justice principles that are clearly operationalized within policy and regulations. Such legislation would necessitate the design of institutional arrangements that embrace the values, worldviews and knowledge systems of the diverse range of ocean users and stakeholders and the creation of systems of collaborative engagement, knowledge sharing and co-management. Procedures for responding to the needs and priorities of marginalized coastal communities as well as establishing mechanisms to operationalize fair and equitable benefit sharing, and conflict resolution, would be other critical elements of such legislation. Providing opportunities and spaces for coastal users at the planning and decision-making table would be key to such a governance framework. The establishment of a national intersectoral, interdisciplinary and representative structure (e.g., a national co-ordinating committee), that is tasked with overseeing the development of a new OE policy and the design of institutional arrangements for its governance, is an important step in re-charting the future pathway of South Africa's ocean economy.

In seeking to create just and sustainable ocean access, use and governance, consideration of procedural, distributional, and where appropriate, restorative justice issues, would be critical especially in the context of marginalized coastal communities who depend on the sea and have strong cultural connections to this space. While procedural justice would require providing opportunities for inclusive and robust participation of coastal communities in all aspects of ocean planning and decision-making, it would also require recognition of customary rights and preferential access rights, as well as recognition and prior and informed consent. Respect for and inclusion of local and indigenous knowledge sources in planning, assessments and decision-making would be a further characteristic of such a governance system. Providing clear guidelines on interpretation of these procedural rights and methods for implementation, drawing on recent ocean economy legal cases in South Africa as well as international best practice, would assist in ensuring that ocean users and other stakeholders understand the notion of procedural rights.

In terms of distributional justice, mechanisms are required that promote fair and equitable distribution of benefits and harms from ocean economy plans and projects with a particular focus on minimizing any harm to already marginalized individuals and communities. If a plan or project may lead to any individual or group bearing an undue burden or suffer any harm, such projects need to be reconsidered or just compensation must be agreed upon with affected persons prior to the decision being taken. Where an agreement cannot be reached, mediators must be called in to assist parties reach a fair decision and outcome.

In view of South Africa's unjust and violent past, particular attention must be paid to situations where restorative justice is required. This would likely involve situations where coastal communities have been dispossessed of their land and rights of access to coastal and marine resources due to for example the declaration of a MPA, or through mining activities or port development. Recognizing these past injustices, and exploring mechanisms for restoring rights, or remedying unfair restrictions, or awarding compensation, would be necessary before exploring the costs and benefits of any proposed plan or project for the area. Providing opportunities for communities to express grievances regarding past injustices, and articulate their needs, priorities and vision for the ocean are key to the transformative work required to create an ocean economy that is inclusive, sustainable and equitable. This approach may lead to fundamental reimagining of our ocean economy conceptual framing, priority sectors, governance approaches and decision criteria and align more with South Africa's Constitutional principles and most significantly, our international commitments in the context of climate change and biodiversity protection.

6 Conclusions

This review and critique of South Africa's blue economy initiative has highlighted the complexities, contradictions and injustices associated with its development, interpretation and implementation. Despite the original conceptualization of an ocean economy that would improve human wellbeing and social justice, and reduce environmental risks, coastal communities are being further marginalized and squeezed out by rapid and large-scale ocean developments. There is a fundamental flaw in the conceptualization of sustainability inherent in the current expression of the blue economy.

A particular ideology of economic development and the lack of an over-arching governance framework that clearly and explicitly locates environmental and social justice as a critical outcome of any development, has undermined the sustainability of South Africa's OP blue economy initiative. Although current legislation includes commitments to addressing discrimination and inequity in access to and use of resources and promotes equitable benefit-sharing, existing power relations and the dominance of a capitalist, neo-liberal development drive have thwarted the realization of these principles and re-directed the focus of the blue economy toward the benefit of large, industrial interests.

Solidarity across coastal communities, civil society and social movements has made significant progress in resisting these power relations and reclaiming the ocean space.

In terms of the way forward however, there is an urgent need for an inclusive, integrated, environmentally sustainable and socially just approach to ocean governance that recognizes that environmental and social justice are inseparable from economic development. There is no future ocean imaginary without addressing our need to transform the current trajectory and political economy of the ocean, develop new policy and legislation that clearly operationalizes these environmental and social justice imperatives and ensures that implementation of ocean developments enables ocean-human wellbeing. As expressed in the new Global Biodiversity Framework, this is a "Wholeof-government and whole-of-society approach" and "Its success requires political will and recognition at the highest level of government and relies on action and cooperation by all levels of government and by all actors of society" (CBD Section 7c, 2022).

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Science Faculty Ethics Committee, University of Cape Town. The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required from the participants or the participants' legal guardians/next of kin in accordance with the national legislation and institutional requirements.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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