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The Blue Economy approach to ocean and coastal sustainable economic development in Seychelles and across East Africa promises great potential and has emerged to dominate regional attention on sustainability. Yet we contend that a policy consensus presenting the Blue Economy as “the solution” to sustainable development and associated high level political rhetoric limits critical evaluation of complex practical opportunities or risks and avoids difficult debates on the compromises needed.

This situation is understandable because a unifying vision needs to create positivity - but the limitations of an approach cannot be addressed if not raised within public discussions of policy. Whilst limitations are awkward to highlight in a policy context that prioritises consensus and simplified messages, it is even more difficult to publicly recognise that there are serious gaps between what policies and laws express and what happens in practice, whether through poor governance or limited resources for delivery. Bringing these issues into the open is where independent voices such as those from universities can play an important role.

There is a need to evaluate the extent to which the Blue Economy addresses a truly sustainable society that has: (1) environmental management to protect and enhance the natural environment; (2) economic development to increase people's livelihoods and society's wealth; and (3) social progress reducing poverty and inequality of wealth and opportunities. For fair societies we need to better imagine how projects can deliver multiple benefits, meet the full suite of Sustainable Development Goals (SDGs), engage populations in the co-construction of sustainability agendas, and ensure all people and communities are included equitably.

For politicians and policymakers...

Ahead of the global conference "Blue Economy and the 2030 Agenda for Sustainable Development" being held 26-28th November 2018 in Nairobi, we aim to provoke deeper critical evaluation and discussions - and motivate leaders to take up the challenges raised

We argue that the Blue Economy approach is best implemented at a regional scale, and to do that politicians need to agree mechanisms for balancing individual states' wins and losses that considered in isolation would hinder progress in cooperation, whilst securing long-term legal stability beyond policies for effective delivery of concrete actions.

We present six key recommendations:

1. Embed the Blue Economy within a regional sustainability framework of operational and compensatory financial mechanisms for balancing individual states' gains and losses
2. Move away from easily changed policies to the long-term stability of national legislation and binding intergovernmental agreements independent of ruling parties
3. Explicitly consider externalities (environmental, economic and social), life cycle analysis, and multiple benefits across all the SDGs for coordinated projects aligned within long-term programmes of action
4. Prioritise projects engaging people with environmental, economic and social sustainability issues in their local surroundings through activities that offer multiple gains, including recreational or financial benefits, and incorporate people's views to co-construct truly mainstreamed sustainability agendas
5. Reshape engagement with universities, with emphasis on capacity building of East African institutions instead of dependence on partnerships led by universities outside the region, and directly bring in broader perspectives and critical evaluations independent of short-term consultancies or grant funding
6. Push for a global financial mechanism that would allow states to forego hydrocarbon exploitation without financial self-sacrifice by connecting climate mitigation and adaptation, such as an enhanced Green Climate Fund with direct levies on greenhouse gas emissions rather than politically-based pledges, or by development financing conditional on avoiding hydrocarbons (such as the World Bank ProBlue trust fund)

For the wider audience...

The first complete **sustainable development** concept is widely agreed to have been set out in the 1987 Brundtland Report (“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”)¹; ensuring the long-term viability of the environment was the criteria on which economic and social development could be described as sustainable. The focus shifted towards economic aims with the 2012 Rio+20 summit emphasising the Green Economy (effectively an imperative to economic development, so long as natural capital is not eroded). The economic imperative of the Rio+20 agenda was modified with a social progress emphasis for the UN’s 17 Sustainable Development Goals agreed in 2015 for The 2030 Agenda for Sustainable Development.

Small Island Developing States including Seychelles pushed for recognition of ocean and coastal economic activity as central to their development pathways in the run up to Rio+20 using the term **Blue Economy**. The Blue Economy is today central to regional cooperation and rapidly evolving policy initiatives for sustainability amongst the ten parties to the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean (Comoros, France (for Réunion Island), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania and South Africa).

The Blue Economy approach is championed in **Seychelles** as harnessing its ocean space for environmentally-friendly economic development, redressing the imbalance of climate change costs, and providing socially equitable development benefiting all sectors of society.

The Blue Economy in Seychelles

With its Exclusive Economic Zone (EEZ) of 1.36 million km², yet a land area of just 459 km², coastal and ocean economics, and therefore the Blue Economy, are central to Seychelles’ development. The western Indian Ocean, through Seychelles and the other nine parties to the Nairobi Convention, is of global interest in how the Blue Economy can be developed through regional cooperation. With disproportionate impact on global policy discourse

relative to its size, Seychelles is for example a pioneer of sustainability financing approaches: for conservation and climate change adaptation (sovereign debt swap redirecting a portion of debt payments to a public-private trust fund); and for sustainable management and increased added value in small-scale fisheries (issuance of a World Bank and GEF backed sovereign ‘Blue Bond’).

Yet the Blue Economy in Seychelles sits alongside, rather than functionally integrates, separate sustainable development, climate change, and conservation strategies; and the new National Development Strategy appears to continue in the same vein of institutional silos. James Michel, whilst the nation’s President, led Seychelles’ focus on the Blue Economy and set out a manifesto for it as essentially an economic model in his book ‘Rethinking the oceans: towards the Blue Economy’ - notably, conservation only appears in the ninth of ten chapters, entitled ‘not forgetting biodiversity’.

Moreover, there is extensive cynicism amongst the public (and even practitioners) about how much policy translates to action and what the Blue Economy approach will actually deliver. This discussion paper aims to synthesise key issues and provide a balanced assessment of those concerns, whilst highlighting key recommendations for change in how we deliver the Blue Economy.

Views from outside the policy bubble

As independent commentators, we can draw on evidence and arguments that do not support the consensus, including from activist groups, in a way that people within regional organisations, governments or working groups cannot easily do. Observations of the developing Blue Economy approach in Seychelles highlight disconnects, distortions and missed opportunities, which we feel are important to highlight so limitations can be addressed and opportunities for effective implementation not missed.

Practical realities, economic activity for enforcement, missed opportunities, and ensuring social justice

Drawing on experiences from conservation management across Seychelles, we argue that it is important to recognise that policies and intended outcomes differ from actual practice and on the

¹ [World Commission on Environment and Development \(1987\) Our Common Future](#). Oslo: United Nations

ground reality. We question, for example, how meaningful zoning and protected area status within Marine Spatial Planning will be given the challenges of effective management and enforcement. Our own experiences are of struggling to effectively dissuade or challenge open fishing and exploitation of protected areas even around the population centres of the inner Seychelles. In the wider seas that make up the great majority of Seychelles' EEZ, we understand from encounters with fishers around the few settled islands, anecdotal reports, and informally from practitioners that there is substantial illegal, unreported and unregulated fishing. Protected area effectiveness issues are not limited to Seychelles of course, and we recognise that the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) is directing substantial resources from the debt swap and Blue Bond towards this. Harnessing the economic potential of regional seas with associated infrastructure (physical presence of people and monitored aquaculture, wind farms and others) through the Blue Economy might, however, offer the only realistic means by which protected areas in remoter parts of the western Indian Ocean can be effectively enforced - because economic activity, and people present, makes monitoring and enforcement possible.

To emphasise the challenges involved, consider the tuna fishing industry across the western Indian Ocean (which is about as big and organised as a sector of the Blue Economy can get). There is intergovernmental management through the Indian Ocean Tuna Commission, developed monitoring plans with fisheries observers on vessels, automatic monitoring systems, and more. The governments of Seychelles and Mauritius share management, for example, over the Mascarene Plateau and Saya de Malha Bank with governance and enforcement at the forefront of what is available. Yet extensive illegal fishing and serious abuses of human rights, including evident slavery and possibly murder, on tuna fishing vessels in this flagship management area continue to be documented².

Blue Economy activities should also be planned to deliver multiple benefits across the SDGs. As an

example, instead of single benefit wind turbines (renewable energy reducing use of fossil fuels) on reclaimed land, as developed in Seychelles, future wind energy projects should deliver multiple benefits aligned to various areas of the Blue Economy and of sustainability. Offshore wind turbines elsewhere have demonstrated additional positive impacts such as for fisheries (through aquaculture beds, moorings for fish cages, long lines for shellfish, use as fish aggregation devices), acting as *de facto* protected areas, and giving social benefits as community-owned assets.

Aquaculture has been highlighted as a key opportunity for maximising economic yields from the sea - yet aquaculture enclosures in coastal waters also concentrate nutrients, drugs and waste impacts that affect surrounding areas, give rise to disease exchange, and can have serious negative impacts on neighbouring small-scale fishers. Negative impacts for small-scale fishers such as reduced catches or greater fuel costs due to having to travel around aquaculture enclosures may of course be more than made up for at a national scale by increased fishery yields and profits - yet that is little comfort to the fishers' whose livelihoods may be negatively impacted. Financial and organisational barriers to entry exclude such fishers from directly engaging and benefiting from aquaculture, so what specific mechanisms can compensate? Programmes could engage small-scale fishers in aquaculture, as for example Seychelles' Mariculture Master Plan aims to do, but what if people do not want to change from their existing work patterns and lifestyles?

Six key recommendations

1. Embed the Blue Economy within a regional economic framework of broader sustainability

Cooperation and sharing of benefits on a regional scale and net evaluation across broader environmental, economic and social sustainability criteria is essential, perhaps as part of a wider economic framework that balances individual states' gains and losses across different sectors, if we are to progress as a region towards overall sustainability objectives. Consideration at a regional level would allow us to balance the different strengths and needs of individual states across a wider scale and so moderate the wins and losses that considered in isolation might otherwise

² Greenpeace (2016) *Turn The Tide. Human Rights Abuses and Illegal Fishing in Thailand's Overseas Fishing Industry*. Philippines: Greenpeace Southeast Asia

hinder progress in cooperation between states. That might, for example, be balancing the primacy of Seychelles and other island states in the specific ocean and coastal economies (because of the high proportion of ocean space as a percentage of their EEZ) with the primacy of states with large land masses such as Kenya for agricultural potential (Green Economy) - island states such as Seychelles are acutely short of agricultural land and dependent on food imports. States could pool resources to better access (and share) the Blue Economy - by, for example, state-led establishment of regionally owned tuna fishing fleets.

2. From changeable policies to a secure legal basis

Moving from changeable policies to long-term stability with national laws and enforceable intergovernmental agreements is, we argue, essential to allow meaningful implementation. Without stability for the Blue Economy and wider sustainability programmes, lead-in times for policies are then followed by lead-in times for replacement policies, without getting on to the actions that translate policy and rhetoric into reality. Abandoning policy as a matter of principle when ruling parties change is a familiar story.

We identify two key approaches for long-term stability that should be taken up more widely. The first is to move from policy to legislation within states, as modelled by the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) and in the UK by the Climate Change Act, which have a secure legal basis through national legislatures. The second is to move to binding intergovernmental agreements, with meaningful and enforceable financial penalties for non-compliance, that sit above changes in national governments and so have long-term stability.

3. Explicitly consider externalities, life cycle analysis, and multiple benefits across the SDGs

Externalities (environmental, economic, social), long-term implications, life cycle analysis and multiple benefits across the full suite of SDGs need to be considered in all policies, programmes and projects. This could build on the social and environmental assessment of development financing outlined under the Equator Principles and on a range of similar frameworks for Blue Economy safeguards (such as the Sustainable Blue Economy Finance Principles and the Principles for

Investment in Sustainable Wild-Caught Fisheries). We also need to identify and deal explicitly with specific losers and vulnerable groups, and how the impacts can be ameliorated. Maximising benefits could include sharing value generated, for example from cheaper energy or by programmes for community ownership of assets (such as renewables, tourism, or aquaculture). In ameliorating impacts we also need to avoid commodification of natural capital and of people - there is a danger of treating habitats, carbon, and people's homes and livelihoods as commodities that can be simply provided with an alternative of equal value in the same or a different location.

With regard to social justice, the apparent narrative of "islanders as victims" fails to distinguish between groups in society. This is ironic in Seychelles given the increasingly apparent wealth disparities, in particular on the main island Mahé with the presence of wealthy Arab royalty and with the luxurious Eden Island development dominated by wealthy foreigners and local elites. Who will benefit from the financial gains of the Blue Economy? Without putting specific mechanisms in place, barriers of capital and limited awareness and organisation capabilities restrict the ability of especially the poor to take advantage of opportunities to engage. The voices of these individuals - whilst heard locally amongst communities and occasionally reported by journalists - are difficult to hear in the policy arena. Whilst states overall may benefit, the specific groups and individuals losing through climate change, environmental degradation or economic adjustments do not align with those best positioned to take advantage of development of the Blue Economy. We therefore also require assessments of capacity needs and social impacts, with appropriate and resourced responses, before entering specific sectoral development pathways.

4. Engage people through activities and gains for co-construction of sustainability agendas

We need to move beyond community consultations, to more deeply engage with local stakeholders on sustainability issues that are relevant to them. This should use activities and experiences that offer multiple gains, including recreational or financial benefits, and gather meaningful input to shape policy. People and communities can make their own decisions and

input informed perspectives based on their own priorities and values, as for example with locally managed marine areas (the first of which is currently being developed in Seychelles). As well as engaging people with community action, dialogue allows co-construction of truly mainstreamed sustainability agendas, rather than just feedback. Bottom-up engagement of communities to take ownership of funded programmes improving local places and landscapes, along with nature walks, citizen science and other wildlife monitoring, can both deliver action and bolster the general population's support for the challenging sustainability agendas we need to mainstream³.

5. Reshape engagement with universities for independent broader perspectives and capacity building of East African institutions

There is a rigorous scholarship resource in universities which can be more effectively engaged by policymakers and politicians in critically evaluating the compromises and opportunities of translating policies and political ideals into coordinated programmes of effective actions. And effective engagement does not mean consultancy to validate the policy consensus - it is instead long-term and reflective work exploring and negotiating difficult choices and options.

In terms of capacity building for ongoing embedded expertise and continuing dialogue, however, the current situation of academic research led by European and North American universities, with limited East African involvement beyond providing PhD students, needs to change. Firstly, where can those East African students go after completing their PhDs, other than to work abroad, if there are not well-funded local institutions within which to build long-term careers? Employment on short-term consultancy contracts does not help effective ongoing engagement or genuine critical evaluation. Political leadership is needed here to push for change in global funders' approaches (World Bank, GEF, United Nations) so that funding better develops local universities and experts (such as the Blue Economy Research Institute at the University of

Seychelles); and universities need to step up to meet the strict operational standards of such finance if they are to be supported. International research collaborations should be hosted and led by local partners with outside input and support, not the other way round, if we are to build East African leadership and expertise in sustainability and have real impact within our nations.

There are also fundamental drawbacks to the present mode of university research, funding, and international partnerships. In terms of effective scholarship, grant funding dependent research greatly constrains academic attention (aside from inevitable biases to agree with the discourse of the funding context) and a research funnel towards increasing specialism in an academic career runs contrary to the interdisciplinary skills needed for sustainability. University criteria for valuing outputs are today predicated on peer-reviewed research (in-depth review by fellow academics, which we agree has a role ensuring quality) but this restricts engagement in discussions and influence on practice because of the long gap between completing work to publication (typically 6-18 months), limiting real time policy relevance.

6. Global push for a financial mechanism so states can afford to forego hydrocarbon exploitation

A significant threat to climate action, which has not been openly challenged, is the explicit aim for exploitation of oil and gas in Seychelles if commercially viable (ironically as part of the Blue Economy agenda, highlighting how it is not synonymous with sustainability). If Seychelles pursues future exploitation of oil and gas, this undermines its credibility in pushing others to take climate and wider sustainability action. Yet it is at present difficult to make the case for not exploiting hydrocarbons as an economic resource given the potential difference this could make to Seychelles' economic development. For global climate action to be effective we need to be able to make that argument - and economically - for Seychelles.

That would require bridging the disconnect in financial and political drivers between climate change *mitigation* (reducing the impacts of climate change; i.e. the reducing greenhouse gas emissions that come largely from hydrocarbon exploitation) and climate change *adaptation* (coping with those impacts). Whilst the insurance industry is

³ Moolna et al. (2018) Engaging people with carbon and climate change using landscape scale conservation and biodiversity monitoring. In: Leal Filho et al. (eds) *Handbook of Climate Change Communication: Vol. 1. Climate Change Management*. Switzerland: Springer

increasingly developing products that require improved sustainability standards, the problem remains that currently individual nations can make concentrated economic gains associated with greenhouse gas emissions and fossil fuels, whilst the costs of climate change impacts are diffused across the world. It is because of this disconnect that we argue nations cannot take the action needed - and why at present it would be a futile economic self-sacrifice if Seychelles was to forego exploitation of hydrocarbons. Could this be overcome with, for example, an enhanced Green Climate Fund (the operating entity for financial mechanisms of the UN Framework Convention on Climate Change) that has substantial direct levies on emissions rather than political pledges?

More broadly, there are wider sustainability areas with economic imperatives that can only be addressed through global action. Opening up global food markets to develop earnings from international agricultural exports is key to development of the Green Economy of the continental East African states. Environmental management to protect and enhance the natural environment also requires a global transition to a circular economy concept - essentially reconfiguring flows of materials so they can be efficiently reused and recycled for minimal complete loss and waste. Standards that would allow a circular economy of plastics, addressing the problematic complexity of multiple polymer types and use with other materials that limits reuse and recycling, can only be addressed within global frameworks. Regulations and standards for reusable and recyclable components within global products such as cars, phones and other technologies can also only be addressed globally.

Progress on these issues requires credibility of leadership - as Seychelles currently has but risks losing if it pursues oil and gas. This is how the potential exploitation of hydrocarbons can be argued (needing future economics research) to have financial penalties. Beyond the economic benefits of hydrocarbons, what about the economic cost of being unable to deliver these changes? The annual productivity of ecological

functions of the western Indian Ocean is, for example, estimated to be at least US\$20.8 billion⁴.

Call to action

With our analysis and recommendations we hope to have prompted readers to consider alternative perspectives, limitations and conflicts that are missed out of the policy consensus. We welcome feedback and discussions on what we intend as a broad and accessible overview of the complexities and opportunities for moving from policies and high level meetings to real actions that contribute more effectively to environmental, economic, and social areas of sustainability.

We also emphasise the need to listen to the voices of the great majority of people who are not policymakers, practitioners or academics and for whom the policy pronouncements have little apparent reality beyond the newspaper headlines.

Seychelles and fellow East African states are well positioned to adapt the Blue Economy approach to deliver truly effective, complexly managed, and secure long-term sustainable development, for the region and for the world. That delivery will depend on politicians and policymakers recognising the challenges - and stepping up to both address problems and seize opportunities.

Contact for further discussions

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⁴ Obura *et al.* (2017) *Reviving the Western Indian Ocean Economy: Actions for a Sustainable Future*. Switzerland: WWF