

Institution: University of Portsmouth		
Unit of Assessment: UoA 17: Business and Management Studies		
Title of case study: Blue Governance for Healthy Oceans and Economies		
Period when the underpinning research was undertaken: 2005-ongoing		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Pierre Failler	Role(s) (e.g. job title): Professor of Economics	Period(s) employed by submitting HEI: 01/04/1997 - date
Period when the claimed impact occurred: 2014-2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact</p> <p>Pierre Failler is the leading exponent of 'Blue Governance' (BG), an approach to managing aquatic ecosystems that combines and expands upon Blue Growth (BGr) and Blue Economy (BE) strategies. It places ecosystems and their governance at the forefront of decision-making, positioning them as the central component of sustainable economic policies that pertain to marine environments and resources. Failler's research and engagement with stakeholders is significant as it has led to the improved design [and ongoing] implementation of more sustainable ocean management policies at both international and national level:</p> <p>At the international level, Failler's vision of BG has gone beyond shaping global policy discourses on how ecosystems are valued and their contribution to human wellbeing, to the more practical issue of designing regional BE strategies and toolkits. This is most evident in the African case, where his recommendations have been incorporated into the regional strategies of the African Union (54 countries) (Impact 1). At the national level, Failler's research has led to the design of localised BG strategies that are now being implemented in various countries, including the Bahamas (Americas), Bangladesh (Asia), and the Seychelles (Africa) (Impact 2).</p>		
<p>2. Underpinning research</p> <p>Failler has been providing expert advice to such stakeholders since his appointment at Portsmouth in 1997. In 2005 he led a EUR4,100,000 EU-INCO project (ECOST, 2005-2010) bringing together 23 partners spanning Asia, Africa, the South Pacific, Europe and the Caribbean to evaluate the societal costs of fishing practices and fishery policies (G1). The 102 peer-reviewed journal outputs and the associated reports and briefing papers that resulted subsequently informed fishing policy across the globe, even attracting favourable comment in the New York Times (14/1/2008). Failler subsequently led or was a key participant in projects funded by the International Union for the Conservation of Nature (fisher migration in West Africa, 2009), World Wildlife Fund (fisheries policy and fisher poverty in West Africa, 2012), Centre National de la Recherche Scientifique-France (coral reef evaluation in the Caribbean) and the EU (Assistance Mechanism for the Atlantic Action Plan, 2014). In the latter project, one of the key tasks was to ensure the Plan's objectives were fully coherent with the EU's "Blue Growth" (BGr) initiative. This led Failler to speculate whether an objective (growth) was indeed realisable if underlying governance systems relating to that objective are ignored – and hence the notion of 'blue governance' (BG) came to increasingly dominate his thinking.</p> <p>The question of how aquatic ecosystems are valued is central to BG research. However, Failler argues that merely valuing ecosystems is insufficient as while economic valuation "can contribute to improving decisions, helping ensure that environmental concerns are taken fully into account, [it is] not a replacement for deliberation, but rather part of it" (R1, p.371). Instead, the multi-disciplinary BG approach he has developed proposes that structures and processes are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment, and broad-based participation.</p> <p>Failler's growing stature in the fisheries field saw him invited in late 2014 to work with the UN Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) in the development of its first public product - its Conceptual Framework (2015). Failler's role was to offer expert insight and practical examples of how 'institutions and governance systems determine, to various degrees, the access to, and the control, allocation and distribution of components of nature and anthropogenic assets and their benefits to people' (R2, p.6). This allowed him to expand upon the central tenets of the BG approach – namely, how governance systems can be mobilized to</p>		

'foster the recovery of many depleted marine ecosystems (nature), fisheries (nature's benefits to people) and their associated food security and lifestyles (good quality of life)' (R2, p8). It is from this underpinning research that the unique approach of BG emerged. **He was subsequently appointed as a lead author for the IPBES regional report on Biodiversity and Eco-Services for Africa**, taking the role of joint coordinating lead author (with Kasisi) on *Chapter 2: Nature's Contributions to People (NCP) and the Quality of Life*. The chapter, which drew extensively upon his previous research (seven of his published articles are cited), emphasized the need to elevate and operationalize the contribution of indigenous and local knowledge (R3, p.70). It also delineated how NCP is critically, and crucially, mediated through governance systems, irrespective of whether these contributions take a material (i.e.: fish as a protein source), non-material (i.e.: recreational and spiritual fulfilment), or regulating (i.e.: marine protected areas) form (R3, p.81). These ideas fed into the co-authored 2018 Science publication where NCP is identified as 'one of the more recent key elements in the IPBES conceptual framework', and which 'elevates, emphasizes, and operationalises the role of indigenous and local knowledge in understanding NCP' (R4, p.270). **Inevitably, the holistic nature of the BG approach and the specificity of indigenous/local knowledge and governance systems means policy solutions must be devised – and applied - in a case-specific manner.**

The growing recognition of the potential of the BG approach and the NCP conceptual framework for policy-making has resulted in Failler being commissioned as both project lead and/or lead author on a growing number of projects and regional/national policy and strategy papers. These include the Africa Blue Economy Strategy (R5), and the recent UN-Environment Project on defining a Blue Economy Approach and Guidelines (G2). He has also worked with the World Bank on synthesizing the BG and Blue Economy approaches to aquatic development, a collaboration that spawned a publication in a peer reviewed journal on the policy options for delivering the Blue Economy in Bangladesh (R6).

3. References to the research

- (R1) Tinch, R. et al. (2019). Economic valuation of ecosystem goods and services: a review for decision makers. *Journal of Environmental Economics and Policy*, 8(4), 359-378. <https://doi.org/10.1080/21606544.2019.1623083> (21 authors including **Failler, P.**).
- (R2) Díaz, S. et al. (2015). The IPBES Conceptual Framework - connecting nature and people. *Current Opinion in Environmental Sustainability*, 14, 1-16. <https://doi.org/10.1016/j.cosust.2014.11.002> (84 authors including **Failler, P.**).
- (R3) **Failler, P.** et al. (2018) Chapter 2: Nature's contributions to people and quality of life. In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for Africa. In Archer, E., Dziba, L., Mulongoy, K. J., Maoela, M. A., & Walters, M. (Eds.). *Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, Bonn, Germany, pp. 77–130. <http://doi.org/10.5281/zenodo.3236178>
- (R4) Díaz, S. et al. (2018). Assessing nature's contributions to people. *Science*, 359(6373), 270-272. <https://doi.org/10.1126/science.aap8826> (30 authors including **Failler, P.**).
- (R5) **Failler, P.** et al. (2019). *Africa Blue Economy Strategy*. Nairobi: African Union – Inter-African Bureau for Animal Resources (AU-IBAR). https://osf.io/3vy94/?view_only=ea6924dc03bd4f728f5635e81ee6bfc6
- (R6) **Failler, P.**, Gulam Hussain, M., Alam, K., Al Karim, A. (2019). Policy interventions for the Blue Economy of Bangladesh. *Journal of Ocean and Coastal Economics*, 6(2): 1-31. <https://doi.org/10.15351/2373-8456.1099>

The references above contain four peer-reviewed journal articles (R1, R2, R4 and R6), one book chapter (R3) and one policy report (R5). Following peer-review, R 3 and R4 were adjudged as of 2* REF2021 quality. To date, R1 and R4 have been cited 1,265 and 836 times, respectively.

Exemplary grants

- (G1) **Failler, P.** ECOST "Ecosystem, Consilience and Societal Costs of Fishing in Asia, Africa and the Caribbean. Funded by the European Commission, January 2005- December 2008 (GBP434,182).

(G2) Fletcher, S. & **Failler, P.** *Sustainable Blue Economy*, Funded by the United Nations, September 2020- August 2021 (GBP120,741)

4. Details of the impact

Failler's research has had a strong and long-term impact upon public policy at both the international and national level. These policies, in turn, are leading to the improved design of environmental policy in the aquatic field across a growing number of (implementing) countries.

Impact 1: Changing International Policy

Africa is a significant testing ground for BG policies. Three of its large marine ecosystems (LMEs) rank within the first four most productive LMEs in the world. If all catches in African waters were landed in Africa, the sector could contribute a landed value of USD20 billion to national economies, with an additional USD3.6 billion injected by the small-scale fishing sectors across the value chain. This represents 1.26% of the GDP of all African countries (and up to 35% for some of the small island states). Not surprisingly, the fisheries of Africa provide a source of livelihood for 8,000,000 active fishers and their families, with the Food and Agriculture Organisation (FAO) estimating as many as 6,000,000 of these could be in poverty (**R3**).

Failler was appointed as the joint co-ordinating lead author (overseeing the research of 14 national experts) for the IPBES African regional assessment chapter on 'NCP and Quality of Life' in April 2015. His specific contributions were to; (i) identify the mix of governance options, policies and management practices that are currently available to reduce the loss of aquatic biodiversity and of NCP in that region, and (ii) provide a series of take-home messages for revitalising international policy development on the theme. His influence was strongly evident in the second of the two exhortations *The Future we Want – Making it Happen Together* in the final report, highlighting to policy-makers that "Governance options that harness synergies and deliver multiple benefits, supported by an enabling environment, **can help** to balance patterns of access and allocation of ecosystem services in Africa. Policy coherence **may also contribute towards poverty reduction and help to build resilience.**" (the emphasis is ours) (**S1**, p. 15).

It also led the African Union to take action following at the Nairobi Sustainable Blue Economy Conference of November 2018. African leaders at the Conference directed the African Union to work with "relevant stakeholders to develop a blueprint of Africa's Blue Economy Strategy (ABES) that will guide sustainable development and utilization of resources of the Oceans, Seas, Lakes and Rivers for blue economy growth and livelihoods" (**R5**, p. ix). Failler was appointed in June 2019 as one of six experts, and his imprint is clearly evident in the final February 2020 document (**S2**). **Central to the Strategy was the creation of a BG Office reporting directly into the higher echelons of the AU decision-making hierarchy.** Its mission is to ensure policy coherence, not only in the realms relating to the management of biological resources (i.e.: fisheries), non-biological resources (i.e.: oil and energy) and ocean governance, but also ensuring BG policy aligns with the longer-term objectives of the African Union Agenda 2063, Africa's Integrated Maritime Strategy 2050, the UN Agenda 2030 (SDGs), and the 2016 Lomé Charter on Maritime Security and Safety. According to Dr. Mohamed Seisay at the Inter-African Bureau for Animal Resources, the BG policy framework under the leadership of Failler is *'likely to be a real game-changer in terms of not only more effectively measuring nature's contribution to people at the international level, but also in providing ever more effective pathways out of poverty for many African fishers and their families'* (**S3**).

ABES is accompanied by an 89 point Blue Economy Implementation Plan 2021-2025, **with BG being the 'overarching thematic area'** (**S4**, p.3). The Plan pledged to implement a specialist BG toolkit combining BE natural capital accounting, marine and freshwater spatial planning, BE Standards (to ensure the sustainability of production, trade and consumption of BE goods and services) and innovative 'blue' funding mechanisms (such as the 'blue bonds' issued by the Seychelles) along the lines advocated by Failler across the region (**R5**). These tools and techniques were developed under the UNECA *Blue Economy and Natural Capital Accounting Systems Programme*, trialled in Djibouti, Rwanda and the Seychelles, and endorsed by UNECA in December 2020 (**S5**). As UNECA states: *'The BE Valuation Toolkit and Operational Manual are*

superlative additions to the armoury of analytic techniques we have available for implementing environmental policy across the African aquatic arena. Failler's role in helping us develop the toolkit in accord with BG principles is worthy of the highest praise.' (S6).

Impact 2: Changing National Strategy

The integration of the concept of BG and its principles into the governance of oceanic ecosystems is, moreover, growing at the national level across the globe. To cite just three examples drawn from three distinct developing regions:

i. Bangladesh (2016-):

The expansion of Bangladesh's territorial waters by more than 30% in 2014 following the resolution of territorial differences with Myanmar offered the country unprecedented development opportunities in sectors such as fisheries, aquaculture, tourism, trade and energy. The challenge, as noted in (R6), was how to take such opportunities and develop smart and sustainable strategies to maximise them – given more than 30,000,000 Bangladeshis are dependent upon the ocean economy. Failler was invited (September 2016) to work as part of a World Bank/EU team with the Bangladeshi government on a BE strategy and policy that would unlock these opportunities and thus realise the nation's blue economy aspirations.

In parallel he was contracted by the Bangladeshi Ministry of Foreign Affairs (MOFA) to work more explicitly on the more immediate policy solutions required in terms of the countries extended marine space pending the approval and subsequent implementation of the comprehensive WB/EU BE strategy (published as *Toward a Blue Economy: A Pathway for Sustainable Growth in Bangladesh*, 2018). The MOFA policy paper (2018) lamented that current institutional arrangements in the country were based on a sector by sector management approach, which was insufficient for sustainable ocean governance. Instead a BG-centric approach was recommended with the prime task of the establishment of a coordination unit across the different government ministries that had previously been working in isolation. In policy terms interventions were proposed across eight policy domains, interventions which all found echo both in a subsequent research paper (R6) and in the amendment of existing policies. *"Mr. Failler's work with colleagues from the Maritime Affairs Unit of the MOFA was instrumental in initiating moves towards a Blue Economy/Blue Governance approach to ocean governance in Bangladesh. The six-point solutions advocated in just one policy domain (fisheries management) have already led the government to enforce restrictions on fishing (including catching and selling undersized fish), in an effort to boost fish stocks, many of which are on the brink of collapse and indeed, it has paved the right pathway towards a sustainable fisheries management."* (S7).

ii. The Seychelles (2019-):

The Seychelles established a Department for Blue Economy to coordinate the country's sustainable development strategy in 2015. In January 2018 it adopted the BE Strategic Policy "Roadmap" 2018-2030 which mandated the development of strategic guidelines for the development of a sustainable ocean-based economy. Failler, given his expertise, was asked in April 2019 to develop a Blue Economy Vision for the Seychelles. The *Blue Economy Action Plan* (S4) was approved in April 2020. It; (i) proposed practical ways to address the gaps in existing BE policy documents; (ii) identified priority areas for BE interventions, and (iii) offered a detailed set of actions for the next five years. The Plan advocated a governance framework that emphasised the importance of blue financing and integration across aquatic sectors, while highlighting the need for policy to be informed by an understanding of culture and the social impact of changes in the ocean environment. Embedded centrally within the Action Plan was a commitment to develop a blue natural accounting framework. According to Mr Kenneth Racombo, Principal Secretary at the Ministry of Fisheries and the Blue Economy (Republic of Seychelles), Failler's *"ideas and counsels have played a major role in helping bring this policy document to fruition"*. (S8).

iii. The Bahamas (2019-):

Following the adoption of its first National Maritime Policy in 2015, the approximately 100 islands making up the Commonwealth of the Bahamas chose to embrace BE principles for the valorisation of its ocean space and the diversification of its economy. Failler was contracted in September 2019, and the *Bahamas Strategy for Blue Activities* over the period 2020-2025 was delivered and

approved in Summer 2020. Though it shares similarities with the strategy for Seychelles, in that it encourages cross-sector and cross-ministry cooperation, as well as regional integration of management, it focuses more on the use of NCP arguments to justify the mitigation of hazards, the reconstruction of natural coastal defences and enhancing the resilience of ecosystems (**R3**). This was perhaps logical as the impact of Hurricane Dorian (August-September 2019) made all too clear to national policy-makers the importance of coastal ecosystem restoration if the country were to cope with future climate change-related events. As a direct result of the strategy, the Inter-American Development Bank (IDB) provided a loan of USD200,000 to the country to finance the BG strategy, including the restoration of reefs on the two islands that were almost entirely submerged during Hurricane Dorian - Grand Bahama and Great Abaco (which have a combined population of almost 65,000 people) (**S9**).

Together, the above international and national impacts have contributed to shifting discourses relating to aquatic ecosystems in order to better recognise their importance beyond economic output, instead considering their more holistic role in terms of NCP and climate change mitigation.

5. Sources to corroborate the impact

(S1) IPBES: The Regional Assessment Report on Biodiversity and Ecosystem Services for Africa – Summary for Policymakers, 2018.

(S2) Letter from Professor Emma Archer, University of Pretoria, South Africa, 18.01.2021.

(S3): Letter from Dr. Mohammed Seisay, Senior Fisheries Officer (Coordinating Implementation of ABES), Inter-African Bureau for Animal Resources, Nairobi, Kenya, 12.09.2020.

(S4) African Union: Africa Blue Economy Strategy, Implementation Plan 2021-25, 2020.

(S5) UNECA: The Blue Economy Valuation Toolkit (BEVTK) - Presentation and Operational Manual, Final Report – Output No 6, December 2020.

(S6) Letter from Dr Mama Keita, Director, Sub-Regional office, East Africa (SRO-EA), United Nations Economic Commission for Africa, Kigali, Rwanda, 25.01.2021.

(S7) Letter from MOFA relating to the creation of the Bangabandhu Chair at UoP where contribution of Failler to development of Bangladeshi policy is highlighted.

(S8) Letter from Kenneth Racombo, Principal Secretary, Department of Blue Economy, Ministries of Fisheries and the Blue Economy, Victoria, Republic of Seychelles, 21.01.2021.

(S9) Letter from Claudia Stevenson, Project Team Leader, Inter-American Development Bank, Washington, D.C., USA, June 2020.