

Blue finance: Why marine PPPs could be a win-win-win

Helen Avery June 05, 2018

Managed marine protected areas are an effective tool in coastal ocean conservation. They are also ripe to be included in investment structures. The upsides for everyone may help push the protected area of the world's seas from 2% to 30% by 2030.



In January this year, the Dominican Republic became the first Caribbean country to create a public-private partnership (PPP) to sustainably manage almost 5,000 square miles of marine

habitat. The whole project is designed to be replicable – and investable.

The co-management agreement (the preferred name of those involved in the PPP) was requested by the country's minister of environment and initiated by Blue Finance, a UN-backed NGO that is targeting improved management of marine protected areas (MPAs) through investable initiatives.

“Quite simply, MPAs are one of the best tools we have right now for improving the health of the marine ecosystems,” says Nicolas Pascal, founder and director of Blue Finance. “We can't depend only on governments and grants to pay for marine conservation. We need a new source of financing that will allow for proper management – sustainable financing – and that is our role, to find investment opportunities that will contribute to better marine reserve management.”

If the co-management moves along without a hitch, it could well be the signal that private impact investors – keen to put their money to work in ocean conservation, beyond donations – have been waiting for.

The notion that our oceans and coastal areas should be managed – particularly for the benefit of private investors – is an uncomfortable topic for some. However, the reality is that effective management benefits the seas and therefore the planet. At any rate there are few alternative medium-term solutions.

“While we have seen an increase in the number of marine protected areas, many don't do what they are designed to do unless they are effectively managed,” says Pascal, “and that needs money.”

“Fisheries will be enhanced, tourism will improve because of the scenic beauty and calmer waters, and coastlines will be more resilient to the impact of waves caused by hurricanes. There's nothing to lose - Nicolas Pascal, Blue Finance”

MPAs encompass many scenarios, from an area being closed to all human activities such as fishing, boating and extraction, to areas designated as marine managed areas (MMAs), which encompass sustainable fisheries, nature-friendly tourism and conservation areas. The methods may vary, but the goal is clear: to mitigate the negative impact of human activity to protect and support marine life in all its forms.

There are around 5,000 MPAs around the world, with 10 alone accounting for 74% of the total area of MPAs. The number of MPAs has doubled since 2010. In that year, the Convention on Biological Diversity (CBD) announced its target of 10% of oceans becoming MPAs by 2020, which

was also adopted by the member states of the United Nations as part of Sustainable Development Goal 14.

That figure was however quickly seen as too low. In 2014, the International Union for Conservation of Nature (IUCN) announced that the new target should be 30% by 2030. Almost immediately, other conservationists argued that 50% would be a more appropriate target.

In 2018, MPAs cover 7% of the ocean, but the majority of these are ‘paper parks’ – meaning that the rules for the reserve are not being enforced. The Malta Declaration calculates that because many MPAs do not offer full protection, a more realistic estimate would be that only 2% of the global ocean is strongly protected.

“The challenge is that many of the countries that have marine reserves are typically developing economies with a myriad of issues vying for attention,” points out Pascal. “The political will and resources that are needed for management of these reserves can be hard to come by. But if you do not police the area and are not fining a fishing boat or recreational boat that is illegally in the reserve, or if you are not clamping down on pollution, then you will see no real improvement in the biodiversity or water quality. There needs to be a level of management.”

Value

The first hurdle to creating managed MPAs is convincing governments of their value. That process can take years of working with the various parties impacted by their creation, such as the fishing, tourism and energy industries.



Kristin Rechberger, Dynamic Planet

“We have to provide the data to show it is the interests of the country’s economy,” says Kristin Rechberger, chief executive of Dynamic Planet, an organization that works with businesses that

invest in nature.

The data is there, she says: “For economies that are reliant on fishing, we know that marine reserves can produce on average almost seven times the amount of biomass.”

Similarly, much tourism is reliant on thriving coral reefs, pristine beaches and abundant marine life.

“A live shark for example can bring in \$5.4 million in tourism dollars over its life time in the Galapagos Islands, versus a shark killed for its fin, which is worth \$280,” says Rechberger.

A harder task, however, is convincing governments of the relationship between ocean health and climate change and the subsequent impact on coastal areas.

“Sea levels are rising. You can build costly dams to protect coastal areas or you can invest in mangroves and sea grasses that not only act as a buffer to coastlines but are also carbon sinks,” says Torsten Thiele, founder of the Global Ocean Trust. “But to move the needle on climate change, we need to work collectively. It is important to work with small countries to make their efforts count.”

The long road to the implementation of MPAs leads Blue Finance to target countries that already have MPAs in place for their investable model.

“It’s the political will that is the chief challenge,” says Pascal. “Even in those countries with MPAs, it can be slow, but we’re hopeful that once we have a couple of structures in place and the benefits become clear, other governments will be more open to the idea of co-management.”

The livelihoods of 20,000 households in the Dominican Republic for example are expected to be improved as a result of the co-management there. Pascal says the support of the former minister of environment was crucial to getting the initiative off the ground, even when the country already had regulations for co-management of protected areas in place.

Blue Finance was approached by the government through its partnership with the UN and, supported by their funding, researched and identified the key partners in the country to work with.

Blue Finance then designed an agreement for the co-management of the second-largest marine reserve in the country with the conservation of critical ecosystems and the enhancement of community livelihoods at its heart, while defining revenue streams for two NGOs east and south of the Dominican Republic that will be in charge of implementing activities.

This agreement was signed last February. Given its complexity, surprisingly it only took six months to finalise.

The NGOs have a wide scope.

“ will oversee coral reef ecosystem improvements,” says Pascal, “such as reducing overfishing and increasing water quality, as well as community engagement, developing

alternative incomes for fishermen, scientific research, and compliance and enforcement.”

“Fishermen have never worked in the formal economy like in hotels, for example, so it can seem to be a challenge to find alternative work - Jake Kheel, Grupo Puntacana Foundation”

On this latter point, the government will decide if rangers can have some limited policing functions so that they are able to issue fines.

More than 25 permanent staff will be recruited overall. Annual operational expenses are expected to run to about \$1 million, with capital expenditure for vessels, scientific equipment and the construction of a visitor centre adding another \$2 million to \$3 million.

“This is the upfront and operational annual cost we anticipate for most countries we are hoping to work with,” says Pascal.

Beyond the environmental returns, the financial return on that investment, however, is expected to be in line with market returns – certainly more than some impact investments, which offer only 1% to 2%.

Pascal says revenues will come from two sources: “The revenue streams are simple. One will be from user fees and entrance fees – paid by the users of marine park, be those tourists or fishermen. And the second will be from more innovative tourism products like a world-class visitor centre.”

The idea is that a collateral-free loan will be issued to the NGOs acting as a special purpose entity through the Sustainable Ocean Fund, an impact investment fund run by conservation investment manager Althelia. Investment will be sourced chiefly from development finance institutions – hopefully with private investors joining. The structure is still in negotiation but is expected to have an eight- to 10-year term with an annual coupon.

These are small investments, but Pascal hopes that, if other countries sign up, the project can be scaled up.

“What we are effectively doing is taking a collection of projects that need investment and grouping them together in a way that allows the investment to be a larger size and provides attractive returns,” he says. “With more countries added, we can scale up and attract investors that want to put larger sums to work.”

Jake Kheel is vice-president of the Grupo Puntacana Foundation. Grupo Puntacana is one of the largest tourism organizations in the Dominican Republic. Puntacana owns and operates Punta Cana International Airport, in addition to a luxury resort complex, Puntacana Resort & Club. The foundation is a founding member of one of the co-management NGOs, the Alliance for the Eastern Reef Sanctuary.

Kheel says co-management of this marine ecosystem will be critical to the bottom line of the Dominican Republic's tourism industry.

"We're 40 years into coastal tourism in the Dominican Republic and much of it has been carried out with very little planning and government oversight," he says. "The impacts of that are being felt. Overfishing and unregulated coastal development are causing increased erosion of our beaches, coral-reef health is deteriorating and, in some parts of the destination, there are so many boats and aquatic activities in the water, it can be chaotic and dangerous."

He says it is the private sector that is calling for change and that the MPA is incentivizing various players to work together. That is helpful, because the importance of collaboration in these efforts is clear. Restricting fishing has obvious costs for those whose livelihoods depend on it, but its impact needs to be limited for the reefs (and tourism) to thrive.

Kheel points out that Parrotfish account for an estimated 60% of the region's local fish catch and are crucial for the health of reefs and beaches. They are the reef cleaners, eating dead coral and algae that kills reefs, while excreting white powdery sand – some 700 pounds of the stuff each a year.



Fishing production in the Dominican Republic has halved since 1996 due to declining fish stocks, but overfishing is still a challenge; (below) fishermen train to be boat captains with Grupo Puntacana Foundation



Not only would restricting fishing be positive for the reefs and therefore the tourism industry (Kheel cites Australia's Great Barrier Reef, which generates well over \$1 billion per year as an example), but coral reefs also support fishermen. Reefs form the nurseries for about a quarter of the ocean's fish, yielding around 15 tonnes of fish and other seafood per square kilometre each year.

In the case of the Caribbean, which is home to 9% of the world's coral reefs, overfishing (not climate change) has caused the most damage. When fishing is stopped, reefs can regenerate in just a few years to produce greater stocks that can compensate the years of income loss, but fishermen must be supported in the interim and so investments in managed MPAs must take this into consideration.

"Fishermen have never worked in the formal economy like in hotels, for example, so it can seem to be a challenge to find alternative work," says Kheel. His company has been hiring fishermen however. "We've directly hired 10 fishermen so far out of 35 to 40 in our area to work as scuba

divers, boat captains and in coral restoration. We have trained their wives and family members to sell souvenirs and other products. Collectively we need to get better at hiring fishermen and their families to reduce pressure on the reef.”

New jobs have been created as a result of the changing oceans.

“We have vast amounts of seaweed coming into shore, for example, that will choke the coral. So, we have built floating barriers to protect the area, and the local fishermen have been hired to clean the barriers and repair them where needed,” says Kheel.

Thoughtfulness around hiring and education is essential. When the Dominican Republic’s National Environmental Protection Service placed a two-year ban on catching Parrotfish last June, local press reported that fishermen reacted violently, burning tyres and debris and blocking traffic on the road.

Kheel adds that part of the challenge is that every community has a different need.



Jake Kheel, vice-president of the Grupo Puntacana Foundation

“/ [redacted] of the co-management, we are going community by community to see if we can recruit [redacted],” he says. “Essentially we all have to agree to what is viable for the fishermen, the tourist

industry, the oceans and the planet, and that isn't often a country-wide plan."

Grupo Puntacana has started implementing measures already.

"We have installed channel markers and mooring buoys, we implemented a membership programme with rules, regulations and user fees," says Kheel. "We even have a patrol boat to respond to issues in our area, both rescue and illegal activity. We are hoping the new alliance can organize others along the coastline and show them how to generate revenues that can pay for the work needed."

Effectively managed MPAs are being pitched as 'win-win-wins' where government, industry and marine ecosystems all benefit. Pascal believes it is only a matter of time before governments embrace managed parks over so-called paper parks.

"Fisheries will be enhanced, tourism will improve because of the scenic beauty and calmer waters, and coastlines will be more resilient to the impact of waves caused by hurricanes. There's nothing to lose," says Pascal.

But he admits MPAs will not cure all the ocean's problems.

"MPAs can't finance water treatment or sewage plants for example," he says. "And they can't prevent the use of plastics, nor encourage recycling efforts and clean up. We can't also counteract decisions to sell coastal land for development. But the structure of a funded and financially sustainable NGO means we can collect data that can better inform governments of the impact on the oceans of land-based sectors."

Managed MPAs also tend to be focused on activities closer to shore. Creating investable MPAs out in the high seas is still a long way off. As Rechberger points out, 60% of the ocean is the high seas, all of which are poorly regulated or unregulated. And then, of course, there is climate change. Reefs can recover quickly from over-fishing once no-take zones are in place, but recovering from acidification due to rising carbon dioxide levels is not so easy.

NatureVest

Blue finance is not alone in trying to create an investable structure around marine reserves.

The Nature Conservancy, through its investment arm, NatureVest, is probably the most advanced global organization driving investment to ocean conservation. It has an \$8 billion balance sheet, a double-A rating and a history of deal making. In 2016, it worked with several European governments and foundations to put together a \$22 million sovereign debt conversion for the Seychelles, the proceeds of which were used to expand the country's MPA to 30% of its exclusive economic zone.

Rob Weary, senior developer of product management at NatureVest, points out that the Seychelles is a prime example of a blue economy at work.



Fishing (chiefly commercial tuna) accounts for 30% of the country's GDP and tourism accounts for 60%. He says it took four years to design and zone the whole marine space, but now countries such as Kenya are looking to replicate the structure.

That structure, he points out, is the financial architecture around the debt conversion and the policy architecture of the marine spatial plan – which includes new marine protected areas and no-take zones.

“We need 30% of the world's oceans to be managed,” says Weary. “For a country, that means a broad range of marine environments such as coral reefs, seagrass beds, mangroves and nurseries. And a good portion of that needs to be a no-take zone.”

He agrees with Pascal that the oversight of no-take zones is key and that revenues from tourists can help pay for drones and policing. NatureVest's research shows that the revenues are there – 95% of visitors surveyed were prepared to pay \$5 or more as a conservation fee.



New coral nurseries run by Grupo Puntacana Foundation and supported by local fishermen are regenerating the region's diverse marine life



Weary says that NatureVest is also looking at raising impact capital alongside grant money to bring similar debt restructuring deals to other countries in the Caribbean, the southern Pacific and the Indian ocean. While that brings in larger sums of money in one go, it is also more complex than Blue Finance's co-management model.

"Many of these countries' debt is in the junk arena, so trying to raise money at lower interest rates with a discount is a challenge," says Weary. "We need to have credit enhancements – perhaps by using the World Bank to guarantee the loans."

Could blue notes become a tradable market? Weary says that there seems to be more appetite for loans than bonds, which involve underwriting costs.

"It's baby steps right now, but the interest seems to be there," he says.

He points to the growth in impact investing and the growing number of banks setting up impact investment divisions.

"There's a lot of interest and a lot of challenges, so the more of us looking at solving these issues of matching investors with conservation solutions the better," says Weary.

MPAs aside, Weary says the opportunities for ocean conservation-related investments are endless.

"Take the Caribbean," he says. "Half the GDP is in tourism, so investment in preserving beaches and marine life is essential. Yet here are economies that rely on diesel for electricity, which is both dirty and expensive, and at the same time have lots of wind and sun. They need investments in renewable energy projects, and the reduction in cost of electricity could provide the returns."

Weary goes on to mention investments in sewage treatment. Some 90% of effluence in the Caribbean goes into the water untreated.

"That's a public health issue but also is unhealthy for the reef," he says.

Water shortages are also impacting the region as a result of climate change.

"Water treatment plants are yet another investment opportunity in the Caribbean," says Weary. "We just need to find mechanisms to attract capital."

It seems clear that donor money and investment money need to work side by side for managed MPAs to get going. In the case of Blue Finance's co-management model, grant money is required for upfront development. NatureVest receives funding from The Nature Conservancy for its initial work.

Panarel says this form of blended finance in an entirely new sector requires education for all parties involved.

“There is a saying in the conservation world that if you ask a biologist and a banker whether money grows on trees, the biologist will respond: ‘What is money?’ and the banker will respond: ‘What is a tree?’

“It’s the same with regards to the oceans – we need to speak in a language that resonates with very divergent sides,” he continues. “Similarly, with governments and NGOs, we have to tread carefully around explaining the role of private capital without scaring them off. We have to show it truly is a win-win-win because we have an opportunity here to bring in capital that we cannot miss.”

If we want to get from 2% of our oceans under management to 30%, then the quicker that education takes place, the better.

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