

BRITISH INDIAN OCEAN TERRITORY (CHAGOS ARCHIPELAGO): OUR GLOBAL OPPORTUNITY



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The British Indian Ocean Territory (BIOT) contains, within its 20,000 km² of shallow coral reefs, a greater marine biodiversity than the rest of the UK and its other Territories combined. It contains as much as half of that ocean's coral reefs which are in good condition even though it is relatively small on an oceanic scale.

The reason for this is simple: except for the island of Diego Garcia which contains the military base, it has been uninhabited for over 35 years. During that period, most parts of the tropical oceans have seen massive environmental declines from pollution, over-exploitation and development using a wide range of unwise practices. In

contrast, this British archipelago has missed all that, having been in a sort of time capsule, in which its rich coral reefs have survived in a way no longer seen in most parts of the world. Even the land has started to see recovery from depredations in their past.

The islands are, by comparison to the reefs, relatively tiny, being just 60 km² in total, spread across 55 or so islands. Half of this land area is the atoll of Diego Garcia with its military base; the other half is contained in 54 tiny islands spread across the Territory. Especially on islands which were too small to convert into coconut plantation, wildlife thrives. The result today is that in this Territory (whose geographical name is the Chagos Archipelago) you will see coral reefs and small tropical islands as they would have looked a century ago, and observe scenes which today are found only in a diminishing number of locations where man has passed them by. Not many places look like this now; there are scattered patches in some remote parts of the Seychelles and Maldives, for example, but there are certainly no other areas with the concentrated richness and size of Chagos. On land, its tiny islands contain about ten internationally designated Important Bird Areas, for example, and even the turtles,

once nearly extinguished for food and their shells, are coming back.

The reason for its present, surviving, great biological wealth is, of course, its lack of population. I do not argue that the now well-known eviction in the early 1970s to make way for the present US military base was handled well, or was fair, or that the previous islanders were not then subjected to miserable conditions. I don't know anyone who thinks they did fare other than badly (although those who were sent to the Seychelles were integrated very much better). Whatever aid that was given at the time, most who went to Mauritius, at any rate, appear to have had a miserable time of it. But, since the days of the eviction many things have changed. The mainstay of the Chagos population was coconut oil, but the palm-oil industry that took off around then had overtaken the increasingly expensive coconut oil by the mid 1970s. According to a recent survey carried out by a prominent Chagossian supporter only about a dozen individuals were identified who say they wish to return permanently.

What to do about Chagos today? Given that it is a core of biodiversity in the increasingly overexploited and populated Indian Ocean, is it worth preserving? Does every ocean

really need at least one surviving remnant, a legacy of the world's past? Is it possible that Chagos is a significant source of biodiversity, including essential and scarce protein, for down-current areas (which in this case is most of the western Indian Ocean and East Africa)? As a result of my own research there over several decades, and that of 50 other scientists who have visited, I have argued that the Indian Ocean needs Chagos, for these and several more reasons. Most of these reasons are scientific, but several are very pragmatic.

Their rich biological wealth would certainly not survive the sort of fishing pressure and hotel, airport and port development typical of many Indian Ocean islands, and which has recently been proposed by some as a way in which the islands could pay their way in a direct, immediate sense. How therefore, could they 'pay their way'? Does everywhere actually have to pay its way in fact, or can the world spare a small number of near-pristine legacy sites?

Earlier this year, at a meeting in the Royal Society, a group of leading scientists prepared a brief document summarising the prognosis for the world's reefs. Why anyone should care about reefs at all is simply because they house the world's richest

marine biodiversity, they provide essential protein for countless millions of people, and for many entire nations they also provide the land itself (the Maldives for example are entirely coral islands, which do not exist long if their component corals don't survive). For many more countries they also provide important breakwaters which, when damaged, leads to flooding and erosion of the land – an important concern when much of that land is scarcely above sea level. In short, coral reefs are needed. The prognosis at the Royal Society meeting was grim. A third of the world's reefs are already dead, mainly because of overfishing, pollution and misuse. The world is warming because of increases in atmospheric carbon dioxide and this is progressively killing more. Added to this, ocean water is acidifying, something also caused by rising carbon dioxide dissolving in water. (This affects not only the skeletons of coral of course, but also the large array of key components of the ocean which make limestone in their skeletons.)

Unfortunately, reefs don't tolerate well the impacts and insults inflicted upon them by the rising numbers of people in the Indian Ocean, who have a population-doubling time, in many countries, of no more than about a decade. It is said often enough that conservation is littered with examples of failure and destruction of resources because people have not been properly engaged in the process. But while sometimes true, most conservation failures are of course caused by the people themselves, whether engaged or not: too many, too hungry, taking too much, so that the capacity of the habitat to support people is exceeded. Of the thousands of coastal communities in the world, over the last 25 years the same handful of examples are

regularly produced to attempt to show how people can live harmoniously with their marine environment, but most of these, if not all, have not stood up to scrutiny; some were royal preserves, poaching in which was severely punished. Given that this human behaviour is unlikely to change, what can be done?

Conservation theory seems to go in cycles. One hundred years ago it was thought we (usually 'great white hunters' and the like) should exclude people in order to conserve, or preserve. This was unfair, and didn't usually work very well in any case. Then it was thought that the best way was to engage people in husbanding their habitats. This was socially nicer, but it usually didn't work either; after all, that phase has seen the greatest deterioration of natural habitats. Examples of good habitat, like that in Chagos, are running out, so should we now revert to preserving a few 'legacy' areas which, on one hand, are in good condition now for whatever reason, and on the other have a good chance of remaining so? Candidate sites are few and diminishing, and we must remember that once gone, all past evidence shows that we cannot get it back. Chagos is probably the only remaining site in the Indian Ocean where this could work. The social dimension may still need a solution, but the science is pretty clear – the ocean needs Chagos as it is.

This is not the place to talk of species' stepping stones, export of larvae, commercial or pharmaceutical values of biodiversity and so on, and in too many cases we find these things difficult to quantify. Some accepted standard methods of valuing habitats have produced values for Chagos of about \$1 billion per year, a value benefiting the Indian Ocean generally. Astonishingly perhaps, this makes the British Indian Ocean Territory a greater provider of aid to the ocean and its nations than other UK government departments and NGOs!

The reason for the existence of British Indian Ocean Territory in the first place was perceived military needs of the cold war. Then, no thought at all was given to other aspects – human or biological. But because of this history, the value of the place in environmental terms is now supreme. It is needed now for many more reasons than could have been envisaged back then, including, for example, its use as a reference site for other parts of the Indian Ocean which are undergoing costly but largely ineffectual attempts at conservation. It shows that, to give another example, a tropical marine area can still recover from climate change impacts when it does not also suffer from local forms of degradation. Chagos gives a prime example of what we need to aim for, which makes its scientific value incalculable. It has been said that

Chagos is amongst those very few sites that will survive global warming for longest (others include the southern Red Sea, a few in the Pacific, but probably none in the Caribbean). Enormous care, not just hopeful aspirations, is now needed to ensure that its continued benefits survive. In any case, most of the world does not have the luxury of time in this regard.

Chagos has been recognised by the Global Ocean Legacy programme of the Pew Environment Group as being one of four sites globally worth establishing as totally protected, and the British Government is exploring details of this. If it is thus established, it would not be just another 'paper park' of the kind that litter the world, but would provide about 20% of the World's Marine Protected Areas. However, most of the latter permit extractive resource use in several ways, so a no-take Chagos conservation area would comprise more like two-thirds of the global total of no-take protected areas. This would be an extraordinary achievement which, today, is possible only here. There is much work to be done on how exactly this should be done, but the need is clear.

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