



Greenpeace UK
Canonbury Villas
N1 2PN
+44(0)20 7865 78100
www.greenpeace.org.uk

SUBMISSION TO FCO CONSULTATION ON WHETHER TO ESTABLISH A MARINE PROTECTED AREA IN THE BRITISH INDIAN OCEAN TERRITORY

1. Introduction

- 1.1. This submission is made on behalf of the UK arm of Greenpeace, an independent nonprofit-making body with autonomous offices in more than 30 countries, including on every inhabited continent. Greenpeace's principal activity is campaigning to prevent environmental harm. It has just less than three million supporters spread over 100 countries.
- 1.2. Greenpeace welcomes the opportunity to respond to the FCO consultation on whether to establish a marine protected area over the British Indian Ocean Territory ('BIOT').
- 1.3. In summary, there is an overwhelming case that the British Government should declare a full no-take marine reserve for the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ).

1.4. The establishment of the full no-take Marine Reserve should be without prejudice to the rights of the Chagossians or the sovereignty claim of Mauritius. The Chagossians have experienced an egregious and historic wrong for which the UK Government should make full amends. Indeed, an important rationale for the creation of full no-take Marine Reserve is to put an immediate end to the ongoing commercial exploitation of the disputed waters prior to the just resolution of the dispute.

1.5. Nothing in this submission should be taken as Greenpeace in any way implicitly condoning the existence of the Diego Garcia military base.

2. Do you believe we should create a marine protected area in the British Indian Ocean Territory?

2.1. There is an overwhelming case for the creation of a marine protected area (MPA) over the BIOT and that this MPA should be a no-take Marine Reserve.

2.2. Marine Reserves can be defined as areas of the ocean off-limits to dumping, destructive activity, and all extractive industry, including commercial fishing.

2.3. Marine Reserves are the single most powerful tool for ocean conservation and may also deliver a range of significant fisheries management benefits. Marine Reserves provide important scientific reference areas and help build the resilience of ocean ecosystems in the face of climate change impacts and ocean acidification.

2.4. The evidence demonstrating the effectiveness of Marine Reserves is compelling. In one review, 89 Marine Reserves ranging in size from 0.002 to 846 km² were with few exceptions shown to have led to an increase in the density, biomass, individual size, and diversity of all functional groups regardless of their size.¹ In another study, the Partnership for Interdisciplinary Studies of Coastal Ocean (PISCO)² assessed over 200 publications in peer reviewed journals to build up a clear picture of what happens in Marine Reserves. In summary the reviewed studies revealed that fishes, invertebrates, and seaweeds had the following average increases inside Marine Reserves:

- Biomass, or the mass of animals and plants, increased an average of 446%.
- Density, or the number of plants or animals in a given area, increased an average of 166%.
- Body Size of animals increased an average of 28%.
- Species Density, or the number of species, increased an average of 21% in the sample area.

2.5. The value of Marine Reserves as a tool in halting marine biodiversity loss has been widely recognized in a number of important international agreements, as has the need to establish networks of sufficient scale. The UN Millennium Project calls for 10% of the world's oceans to be covered by Marine Reserves in the short to medium term, with a long term goal of 30%. Furthermore, echoing pledges taken at the World Summit on Sustainable Development, (WSSD), the Convention on Biological Diversity's 7th Conference of the Parties (CoP 7) committed to the establishment of a global network of marine protected areas by 2012 (Decision VII/28). The CBD's programme of work is explicit in stating that within the integrated network of marine and coastal protected areas there should be 'areas where extractive uses are excluded', and other significant human pressures are removed or minimized, to enable integrity, structure and functioning of ecosystems to be maintained or recovered.³ The UK's Royal

¹ Halpern BS (2003). The impact of marine reserves: do reserves work and does reserve size matter? *Ecological Applications* 13 (1): 117-137

² PISCO (2007) The Science of Marine Reserves (2nd edition, international version) www.piscoweb.org.

³ UNEP/CBD/COP7/L.31 Programme element 3: marine and coastal protected areas.

Commission on Environmental Pollution (RCEP) recommended in its 2004 report '*Turning the tide; addressing the impact of fisheries on the marine environment*' that 30% of the UK's EEZ be designated as no-take zones.⁴ Effective nature conservation in the sea cannot be delivered without Marine Reserves.

2.6. The fishery related benefits of Marine Reserves include:

- Increasing the abundance, average size of target organisms, reproductive output and genetic diversity;
- Enhancing fishery yield in adjacent grounds;
- Providing simple and effective management regime which is readily understood and enforced;
- Guarding against uncertainty and reducing probability of overfishing and fishery collapse;
- Providing opportunities for understanding of exploited marine systems; and
- Providing the basis for ecosystem management.

2.7. The benefits of Marine Reserves to fisheries around coral reefs are particularly well documented. One example is the network of marine reserves established in the waters around St Lucia in the Caribbean, which covers approximately 35 % of the reef.⁵ After three years of protection, the biomass of commercial fish species had tripled within the Marine Reserves and doubled over the rest of the reef. After five years of protection, catches outside the Marine Reserves had increased by 46-90%.⁶ In 1995 a series of marine reserves was established in Egypt's Red Sea, giving an increase of over 60% in

⁴ Royal Commission on Environmental Pollution 25th Report. *Turning the Tide: Addressing the Impact of Fisheries on the Marine Environment*. December 2004. <http://www.rcep.org.uk/fishreport.htm>.

⁵ Roberts, C.M. and Hawkins, J.P. (2000) *Fully Protected Marine reserves: A Guide*. WWF Endangered Seas Campaign, Washington DC, USA and Environment dept. University of York: York.

⁶ Roberts, et al. (2001) Effects of marine reserves on adjacent fisheries. *Science* 294 (5548): 1920-1923.

the catch per unit effort of a fishery in the surrounding waters after only five years of protection.⁷

2.8. Greenpeace endorses and supports the analysis of the critical importance of creating a marine protected area in the BIOT contained in *Chagos Archipelago: its Nature and Future* which is referenced in the Consultation documentation.

2.9. The waters around the Chagos Islands are an astoundingly rich marine ecosystem, possessing the largest and some of the most diverse undisturbed reefs in the Indian Ocean. The environment includes the world's largest coral atoll – the Great Chagos Bank, with a remarkable diversity of 220 coral species and over 1,000 species of fish. The islands provide breeding grounds for 17 species of seabirds and include 10 Important Bird Areas as recognized by Birdlife International. The archipelago is a breeding habitat for 300-700 hawksbills and 400-800 green turtles and home to the world's largest land arthropod, the coconut crab.⁸

2.10. The reefs around the Chagos, because they are comparatively undisturbed and are found in some of the cleanest seas, have some of the most extensive and best conditioned coral in the world. The comparative lack of pollution, fishing, shoreline construction and direct human impact has enabled the Chagos' corals to retain resilience, giving them an improved chance of being able to survive anthropomorphic global warming. The islands are thought to encompass around half of the Indian Ocean coral reefs that remain in comparatively good condition. The surrounding waters of the

⁷ Galal, N., Ormand, R. and Hassan, O. (2002) Effect of a network of no-take marine reserves in increasing catch per unit effort and stocks of exploited reef fish at Nabq, South Sinai, Egypt. *Marine and freshwater Research* 53(2): 199-205.

⁸ Sheppard, C.R.C. and Seaward, M.R.D. (eds.) 1999. Ecology of the Chagos Archipelago. *Occasional publications of the Linnean Society of London*. 2: 350.

Chagos are a unique habitat, containing endemic corals and reef fish. This area also serves as a refuge and breeding ground for large and important populations of sharks and dolphins. At least 60 species listed in the International Union for Conservation of Nature's Red List of Endangered Species are found in the Islands.⁹

- 2.11. The surrounding waters of the Chagos Islands (within the 200 mile EPPZ/FCMZ) include an exceptional diversity of deepwater habitat types.
- 2.12. The Chagos is without doubt a very special and rare place: a relatively unpolluted and undisturbed part of the world, with its reefs and oceans still teeming with life. The size of the area that has to date been de facto protected, together with the comparatively low impact of humans on the Chagos' environment over past decades, have allowed a healthy natural environment to persist.
- 2.13. Coral reef ecosystems, such as those found in the waters around the Chagos, are particularly susceptible to the effects of Climate Change. Ocean acidification and coral bleaching are likely to have an increasingly disastrous impact on these vibrant and biodiverse ecosystems, which means it is of vital international importance to protect as many of these areas as possible from other anthropogenic threats.

⁹ <http://www.iucn-uk.org/Portals/0/Reports/IUCN%20Chagos%20briefing%20Oct%202009.pdf> .

3. *If yes... Which do you consider the best way ahead?*

- 3.1. The British Government should declare a full no-take Marine Reserve for the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ).
- 3.2. Commercial fishing can radically degrade the conservation value of marine protected areas. Only a full no-take Marine Reserve can protect habitats over very long time-scales and only complete protection will provide sufficient refuge for highly vulnerable species.¹⁰
- 3.3. Existing commercial fishing activity in the Chagos is degrading the marine environment of the BIOT. Tuna stocks in the Indian Ocean are themselves in deep trouble¹¹ and bycatch associated with tuna fishing in the region is appallingly high,¹² as well as including species like turtles, seabirds and sharks whose populations are internationally at risk and require urgent protection.¹³
- 3.4. The importance of sharks and other top predators to the health of ocean ecosystems is becoming increasingly apparent. A study by Myers et al published in the journal *Science* analysed fish survey data collected over the last 16-35 years and found that while the abundance of 11 great shark species that consume other elasmobranches (rays, skates, and small sharks) fell dramatically in coastal northwest Atlantic ecosystems, the

¹⁰ Roberts CM (et al) The role of marine reserves in achieving sustainable fisheries. *Philosophical Transactions of the Royal Society* (2005) 360: 123–132.

¹¹ Report of the IOTC Performance Review Panel: January 2009. Indian Ocean Tuna Commission.

¹² IOTC-2008-SC-INF12 IOTC Eleventh Session of the Scientific Committee.

¹³ See <http://www.iucn.org/?3362/Third-of-open-ocean-sharks-threatened-with-extinction>; <http://www.iucnredlist.org/apps/redlist/details/4615/0> and <http://www.iucnredlist.org/apps/redlist/details/8005/0>.

abundance of 12 of the 14 fish species on which they prey had increased sharply. Coinciding with the plummeting shark populations was an explosion in the numbers of cow rays, a major food item for the larger sharks. These rays can grow up to four feet across and as a result of their massive population explosion have driven down shellfish populations to the point that they in effect terminated a century-long scallop fishery with local fishers only able to take scallops from areas protected behind marine fences. The researchers conclude that analogous top-down effects may be a predictable consequence of eliminating entire functional groups of predators.¹⁴

3.5. Whilst recognizing the benefits of protecting large areas in perpetuity, Greenpeace does not believe designation of a Marine Reserve at this time would be a barrier to some modifications in its management in the future. Various models exist around the world demonstrating how zones could be created within the larger marine reserve wherein specific fishing activities could be conducted. For example, native Hawaiians still conduct their traditional activities within the Papahānaumokuākea Marine National Monument, a Marine Reserve of some 362,075 km² established by the United States. Australia has established an effective zoning of the Great Barrier Reef Marine Park whereby a third is strictly no take. The aforementioned Soufrière Marine Management Area in St Lucia is another example where local fishermen are conducting sustainable fishing around fully protected Marine Reserve areas.

3.6. The designation of a full no-take Marine Reserve for the whole of the territorial waters and EPPZ/FCMZ would be an unequivocal step forward by the UK to meeting its international treaty commitments to halting/reducing the decline of biodiversity by 2010,

¹⁴ Myers R. A., Baum J.K., Shepherd T.D., Powers S.P. and Peterson C.P. 2007 Cascading Effects of the Loss of Apex Predatory Sharks from a Coastal Ocean *Science* 315 (5820): 1846 – 1850.

establishing a representative marine protection network by 2012, and restoring depleted fish stocks.

3.7. In July 2009 the French Government announced a commitment to protect 20% of its territorial waters, half of this as no-take Marine Reserves by 2020, including its overseas territories.¹⁵ Given the urgent need for large-scale Marine Reserves, and given existing international commitments, the UK should at least match this ambition, with the ultimate aim of having at least 40% of its territorial waters set aside as no-take Marine Reserves.

3.8. The proposed Chagos Islands Marine Reserve while providing an invaluable oasis for marine biodiversity in the Indian Ocean, also needs to be considered in a larger regional context and indeed the context of a global network of protected areas as enshrined in CBD Decision VII/28. Greenpeace hopes that the United Kingdom government will work and cooperate with other countries in the region to incorporate the Chagos Marine Reserve in a regional network of Marine Reserves.¹⁶

3.9. To ensure the future Chagos Marine Reserve is effective it will need a management plan with clear objectives and appropriate enforcement measures.

4. Do you have any views on the benefits listed at page 11 [of the consultation document]?

What importance do you attach to them?

¹⁵ <http://www.ambafrance-uk.org/President-Sarkozy-on-France-s.html>.

¹⁶ See Roberts, C.M., Mason, L. and Hawkins, J.P. 2006 Roadmap to Recovery: a global network of marine reserves Greenpeace International. <http://www.greenpeace.org/international/campaigns/oceans/marine-reserves/roadmap-to-recovery>.

4.1. Greenpeace fully endorses the benefits listed on page 11 of the consultation document.

5. Finally, beyond marine protection, should other measures be taken to protect the environment in BIOT?

5.1. Although beyond the compass of this consultation, Greenpeace is of the view that the Diego Garcia nuclear capacity military base represents a threat to the local and global environment, as well as to world peace, and should be abolished.

5.2. The establishment of the full no-take Marine Reserve should be without prejudice to the rights of the Chagossians or the sovereignty claim of Mauritius. The Chagossians have experienced an egregious and historic wrong for which the UK Government should make full amends.

5.3. An important additional rationale for the creation of full no-take Marine Reserve is to put an immediate end to the ongoing commercial exploitation of the disputed waters prior to the just resolution of the dispute. In the present circumstances it is wholly unfair that the waters of the Chagos are subject to present degradation by ongoing commercial exploitation.

5.4. Upon the return of the Chagossian people, Greenpeace would be happy to engage with them on how they can best develop small-scale, low-impact, sustainable fishing practices, whilst continuing to ensure the effective protection of this globally-important ecosystem.

Greenpeace UK

Canonbury Villas

LONDON N1 2 PN

+44 (0)20 7865 8100

www.greenpeace.org.uk