Advocacy for Marine Management: Contributions to a Policy Advocacy Initiative in the Maldives

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ADVOCACY FOR MARINE MANAGEMENT: CONTRIBUTIONS TO A POLICY ADVOCACY INITIATIVE IN THE MALDIVES

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PIM 71

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ABSTRACT

On June 5, 2009 a 42-km² area of coral reef situated in the Alif Dhaalu (South Ari) atoll of the Republic of Maldives was designated the South Ari Atoll Marine Protected Area (S.A. MPA) due to a globally significant whale shark aggregation site. The whale shark is notorious for its gargantuan size and docile nature, which has led to a burgeoning tourist industry that gives people the opportunity to swim with the gentle giants in tropical sites such as the Maldives. The S.A. MPA receives tens of thousands of visitors a year that engage in whale shark excursions, however, there is a dearth of monitoring and enforcement of the protected area and no formal Management Plan has been implemented since the declaration of the MPA. The lack of management has led to overcrowding of vessels engaging in whale shark excursions, thereby making it dangerous for the safety of tourists while also jeopardizing the sustainability of the critical whale shark habitat and the area’s natural endowment. This paper is based on my personal contributions to an advocacy initiative coordinated by the Maldives Whale Shark Research Programme to lobby the Environmental Protection Agency to adopt a collaborative Management Plan for the S.A. MPA. A contextualization of the issues surrounding the S.A. MPA is given. Details of the advocacy strategy and methodology used are presented. And a policy paper with a corresponding evaluation is put forward. The paper concludes with lessons learned from working on the initiative.
List of Acronyms

AEC  Atoll Ecosystem Conservation Project
DAM  Divers Association of Maldives
EPA  Environmental Protection Agency
GDP  Gross Domestic Product
GEF  Global Environment Facility
IUCN International Union for the Conservation of Nature
LAM  Liveaboard Association of Maldives
MPA  Marine Protected Area
MRC  Marine Research Centre
MWSRP Maldives Whale Shark Research Programme
NGO  Non-governmental Organizations
S.A. MPA South Ari Atoll Marine Protected Area
UN  United Nations
UNDP United Nations Development Programme
UNESCO United Nations Educational, Scientific & Cultural Organization
Introduction

This paper expounds my personal contribution to an initiative that aimed to lobby the Maldives Environmental Protection Agency (EPA) to enact a collaborative Management Plan for the South Ari Atoll Marine Protected Area (S.A. MPA) in the Republic of Maldives\(^1\). It is the final product that consummates the degree requirements for a Masters of Arts in Sustainable Development from the SIT Graduate Institute in Vermont, U.S.A. As such, it is consistent with SIT guidelines for Policy Advocacy course-linked capstones.

I was fortunate to secure a graduate practicum with the Maldives Whale Shark Research Programme (MWSRP) for a six-month intermittent period starting in May 2012 and finishing March 2013. My responsibilities were in organizational development and in-field coordination of marine research that primarily focused on the whale shark (\textit{Rhincodon typus}). While there I became particularly interested in marine management issues surrounding the primary whale shark research site for MWSRP.

The area, known as the South Ari Atoll Marine Protected Area, faced increasing anthropogenic related threats and had no formal monitoring or enforcement of legal regulations. I was intrigued by the issue not only because of a personal and spiritual connection to the beautiful seascape after spending hundreds of hours conducting research above and below the ocean surface, but also because I found innumerable parallels between marine management and the field of development. Community-based and collaborative marine management approaches advocated by MWSRP made particularly strong impressions upon me because they were tangible examples of sustainable

\(^1\) The term \textit{initiative} is used intentionally and independently of \textit{campaign} so as to make the distinction between the two.
approaches that I found to be scarce in the overall discourse pertaining to international and community development.

For the purposes of this paper I base the term “policy advocacy” on a definition proffered by Professor Jeff Unsicker who states:

Policy advocacy is the process by which people, NGOs, other civil society organizations, networks, and coalitions seek to enhance social and economic justice, environmental sustainability, and peace by influencing policies, policy implementation, and policy-making processes of governments, corporations, and other powerful institutions. (2013, p. 4)

This definition is markedly different from more conventional policy advocacy definitions, because the process that Professor Unsicker mentions encompasses a broader perspective on advocacy than conventional linear equations that state that for input A, outcome B will result, and so forth until the policy objective is complete.

Since the MWSRP had no formal advocacy division or program, this definition is more appropriate to examine the process by which the organization sought to change policy.

The advocacy initiative will be examined using Professor Unsicker’s “Advocacy Circles”. This framework, found in Figure 1, helps to visually depict the overlapping elements that influence policy advocacy. As such, it is important to note that advocacy campaigns and initiatives take place within a certain context, which also plays a significant role in the advocacy process.
because it shapes the landscape in which the stakeholders operate. The circles also help to illustrate the dynamic relationships and interactions that continually influence the arenas in which advocates operate (Unsicker, 2013).

This paper will present a comprehensive view of the MWSRP advocacy initiative that contextualizes the dynamic landscape that influenced the advocacy process. The policy issue will then be presented that will include an analysis of the problem, cause, and solution. Next, the political actors, including MWSRP as the advocates, will be detailed to construct the political arena. Following suite will be a section on the strategy that was used to analyze the problem and conceptualize an advocacy approach. This is an important section because it a precursor that gives an initial direction for the concepts and methods that were used to create The Product (my tangible contribution to the advocacy initiative), herein referred to as the Vision Document. The paper will conclude with an evaluation of the product as well as lessons learnt from working on the advocacy initiative.

Overview

Context

The Maldives is a small, archipelagic nation of 1,190 coral islands that extend 510 miles north-to-south in the central Indian Ocean southwest of Sri Lanka (Central Intelligence Agency [CIA], U.S. State Department, 2011). With a population of a mere 314,000, the Maldives is Asia’s smallest country in terms of population and land area, and is also one of the lowest lying countries in the world (CIA, 2011). A significant portion of the population lives in the nation’s capital, Male’, with the rest spread out over 198 inhabited islands in 26 atolls. These atolls, which are remnants of ancient volcanoes, now
constitute the boundaries for provincial administrative districts (Emerton, Baig, & Saleem, 2009)

Although small compared to other South Asian countries, the Maldives is internationally recognized for its stunning tropical islands and unique marine environments. Scattered coconut tree studded coral islands with white sand literally protrude from aqua-blue water. The archipelago has arguably some of the most productive marine ecosystems in the world in terms of rich biological diversity and flourishing coral reefs. It is these complex ecosystems that form the base of the Maldivian economy and has defined the way of life for its peoples for millennia.

Historical Perspective.

Culturally the Maldives and its people are quite disparate from other South Asian nations due to a multitude of factors - the most notable being geographic location, history, religion, and industry. Situated quite literally in the middle of the Indian Ocean, the Maldives boasts a unique island culture that combines influences of the earliest settlers from India, Sri Lanka, East Africa, and various Arab countries (CIA, U.S. State Department, 2011). The country has operated largely independent from colonial rule, although the Portuguese, Dutch, and British made repeated

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2 The atolls, which are part of the larger Laccadives-Chagos range, are ring-shaped chains of coral islands with an inner lagoons formed after millennia from inactive volcanoes.
attempts at colonization. It wasn’t until 1887 that the Maldives became an official British Protectorate, however, internal politics was left to the local government while the British primarily used the area as a navel base in the Second World War (Maloney, 1980).

Islam took root in the 1100s and steadily gained in popularity, which replaced pre-existing Buddhist, Hinduism, and sun worshiping practices (Maloney, 1980) (CIA, U.S. State Department, 2011). Islamic influence came from the Arab world that used the Maldives as a vital port for restocking ships in need of supplies. It wasn’t only the Arabs that flocked to the Maldives, but traders from across the continents sought out the Maldives for precious commodities that included cowry shells (currency of the ancient world), Maldivian dried fish (once more valuable than gold and could be found on ocean faring vessels due to its nutrition and longevity), choir rope (rigging of ships all over the world of which the strongest was made in the Maldives), and ambergris (wax-like substance found in the gut of whales and used in perfumery) (Maloney, 1980).

Life in the Maldives has always revolved around the sea and the marine environment. Maldivians have historically relied upon fishing and the sea’s bounty for subsistence and livelihoods. There are some islands, though, that have historically specialized in small-scale agriculture, which helped to fuel interisland trade and maintain a healthy social environment for interisland marriages (Heyerdahl, 1986). In addition to providing sustenance, the marine environment significantly shaped local customs, traditions, and superstitions. “Fandita”, a belief system that lives on today, refers to special powers of certain individuals and also ideas about spirits, winds, and lights on the sea. It is said that powers of fandita allow people to control everything from health and prosperity to fish catch, boats, and even enemies (Maloney, n.d.)
The complete dependence upon the physical environment and isolation from mainland civilization helped to entrench this vibrant belief system in local culture. While there are common threads that are woven through most of the island culture, each island is known to have its own unique feel and ambiance that is different even from the closest neighboring islands. Small island populations of only a few hundred people spread out over hundreds of miles of ocean ensured a healthy equilibrium of natural resource use without overuse. While in Maldives I heard a story that said that Maldivians believed that the ocean would replenish itself with fish in the proportion to the amount of fish they caught. It is examples like this that illuminate the natural history and relationship the Maldivians had with the sea for centuries. Fish and sea life were tremendously abundant due to thriving, unspoiled marine ecosystems. Isolation was the means of conservation, and resource depletion never was able to reach a critical point due to low population and limited technology.

That equilibrium no longer exists in the Maldives. As the country opened its borders for tourism and free trade, an influence of foreign goods and technology flooded into the country. Biodegradable materials such as coconut husks and leaves were replaced with more durable plastics. Tourism resorts were developed on uninhabited islands. Plastic water bottles and other rubbish, mainly from tourism resorts, were then found littered across beaches. The modern international fishing fleet started to frequent the productive Maldivian fishing grounds in search of yellow fin and skipjack tuna.

The border was officially opened in the 1970s for tourism, and since then significant developments have been made in island infrastructure (World Trade Organization [WTO],

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3 Only 20 islands have a population over 1,000 people.
2009). The burgeoning tourism industry quickly changed the cultural landscape of the nation, comprised of subsistence and artisanal fishermen, to tourism liaisons and resort workers. Tourism is now the largest employment sector in the country, and men and women routinely leave home to work in resorts to earn a livable wage.

*Modern Economy & The Environment.*

Although the current economy of the Maldives is now dependent on the tourism industry, the health, productivity, and biodiversity of the environment and marine ecosystems still underpin primarily all economic sectors, including tourism. Over 1 million tourist flocked to the Maldives in 2012 to seek out holiday experiences on pristine tropical islands that boast white sand, clear blue water, and teeming coral reefs (Maldives Ministry of Tourism, Arts, & Culture, 2012). This equated to 28% of total GPD; and a staggering 67% if both direct and indirect supporting industry contributions are figured into the equation (Emerton et al., 2009). Fisheries, the second largest industry in Maldives that accounts for 8.5% of the country’s GDP, is entirely dependent on the condition of marine ecosystems.

The former president of the Maldives, Mohamed Nasheed said the following:

> The Maldives’ unique environment is the bedrock of our economy. Fisheries and tourism, our two largest industries, are heavily dependent on a healthy marine ecosystem. Together, these two industries provide three quarters of our jobs, 90% of our GDP and two thirds of our foreign exchange earnings. Moreover, healthy coral reefs help protect our islands from natural disasters and guard against the adverse effects of climate change. (Emerton et al, 2009, p. vii)

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4 These industries would include transportation, telecommunication, financial, and business services.
Before the financial recession fully ravaged world markets in 2008 and 2009, the Maldives had averaged a 7.9% annual economic growth rate for the decade. This contributed to a rising per capita income ($4,300 USD) that is now the highest of all South Asian nations (Maldives Ministry of Finance & Treasury, n.d.) (CIA, U.S. State Department, 2011). It can be extrapolated that tourism was the harbinger of greater economic prosperity and has been the major contributor to the overall economic expansion. In 2011, the country was graduated from the United Nation’s “Least Developed Country List” to the status of a “Middle Income Country” due to increasing prosperity and achievement of overall development benchmarks (WTO, 2009). While the tourism industry does represent employment opportunities for the local workforce, the overall expansion of the industry, coupled with global climate change and globalization, has had negative impacts on the environment through natural resource depletion and environmental degradation (Emerton et al., 2009).

Poverty reduction has been the primary focus of government policies as seen in the National Development Plans from the last twenty years (UNICEF, 2010), although a general shift has occurred that puts more emphasis on the state of the environment and the significant effect it has on local communities. The low-lying islands are immediately threatened by inundation, beach erosion, unsafe groundwater for drinking, and waste contamination. The Maldivian coral islands, which represent 5% of the world’s coral reefs, are actually living organisms that are the basis for marine life in the country (Emerton et al., 2009). Anthropogenic threats now jeopardize the future of the country as a result of overexploitation of reef and apex fish species, poor waste management, unsustainable coastal management practices, and heavy reliance on fossil fuels. In 1998, severe coral
bleaching occurred due to rising sea temperatures related to an El Nino event that killed over 80% of the country’s coral (Solandt, 2008). It is yet to be fully determined whether or not the country will make a full rebound from this event, but indicators at least show some positive signs.

The Maldivian government, international development organizations, and local NGOs are now making the environment a national priority by safeguarding critical ecosystems that focus on sustainable resource use and conservation. Since 1995, the government has established 32 Marine Protected Areas (MPA) for conservation purposes that prohibit certain activities (examples range from scuba diving to reef fishing) (*The Marine Protected Areas in Maldives*, n.d.). All of these MPAs, however, are relatively small and average just a few hectares. Sadly, these are considered “paper parks” due to lack of actual protection and monitoring (R. Rees, personal communication, February 7, 2013)(Emerton, 2009).

Current Maldivian President Dr. Mohammed Waheed Hassan made a bold claim at the 2012 UN Rio+20 Conference on Sustainable Development that the Maldives would be the first country to be a national marine reserve (Gosh, 2012). This statement received significant international attention and was met with lots of internal skepticism. Despite this unrealized grandiose project, there are examples of successful conservation programs that have been implemented recently in the country. One is the Atoll Ecosystem Conservation Project (AEC) implemented by the Ministry of Housing & Environment and United Nations Development Program (UNDP), and co-financed by the Global Environment Facility (GEF). This project established the Baa atoll into a UNESCO Biosphere Reserve and implemented a
Management Plan for the Hanifaru MPA (EPA, 2011). This project became the first biosphere reserve in the country and is used as benchmark for future site plans.

*South Ari Atoll.*

The advocacy initiative this paper examines is on the management of a particular coral reef located in the Alif Dhaalu Atoll. This atoll, known colloquially as *South Ari,* is situated roughly 90-km southwest of the Male’ (See Appendix D for a map). It is part of a larger geological atoll structure known as Ari atoll, which formerly constituted a single provincial administrative district until it was partitioned into two respective North and South regional districts. The general area is a tourism hotbed as a large percentage of the country’s tourist resorts are found in the atoll. In addition to tourist resorts and several guesthouses operated within the atoll, the area is frequented and used by private yachts and scuba dive safari boats known as *liveaboards.* The atoll is popular for scuba diving and snorkeling locations as well as idyllic uninhabited islands available for tourists to explore (Maldives Dive Travel, n.d.).

South Ari is comprised of approximately 46 islands, 10 of which are inhabited and 14 are resort islands.\(^5\) The populations on the inhabited islands vary in size; the largest of which, Maamagili, has a population of 1,671, and the smallest, Dhidhdhoo, boasts a population of a mere 116 people (ISLES, 2013). Most of the employment opportunities in the islands stem from resort positions and commercial fishing that take place outside of the local islands. This is why, at any given time, large percentages of the local populations are absent due to work that takes them away from their home islands for extended periods of

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5 Maldivian law delineates a distinction between inhabited islands and resort islands.
time. There is also an exodus of people from the islands seeking employment opportunities and modern amenities more available in Male’.

The South Ari Atoll is significant for its rich natural heritage and abundance of marine species including dolphins, turtles, whales, sharks and rays. The southern most fringe of coral reef of South Ari is a globally significant aggregation site for the whale shark (*Rhincodon typus*), which is the world’s largest species of shark and feeds primarily on planktonic food. The whale shark was historically hunted in the Maldives and throughout other countries in the world for its liver oil, which was harvested, boiled and used as a waterproofing sealant for traditional wooden boats (Riley, Harman, & Rees, 2009).

The whale shark has been protected in the Maldives since June 24, 1995, and has been included in the Annex I of the United Nations Convention on the Law of the Sea (UNCLOS), under Appendix II of the Convention on International Trade in Endangered Species (CITES), under Appendix II of the Convention of Migratory Species (CMS), as well as being categorized as *vulnerable to extinction* on the IUCN Red List of Threatened Species (Norman, 2005) (Riley et al., 2009).

Over the past decade the tourism industry has fueled a burgeoning whale shark excursion industry in the aggregation area. Unlike other whale shark aggregation sites in the world, docile whale sharks can be found swimming slowly near the surface along the
southern fringe of reef 12 months out of the year. In 2009, the Maldivian government declared the area a protected area for whale sharks in an effort to increase conservation measures. Due to the sharks’ year-round presence and ease of observation, the MWSRP uses this area to conduct long-term behavioral and ecological studies of whale sharks. This is because the sharks exhibit philopatric behavior in the particular area and individuals are can continuously be re-encountered even after years of absence.

Tour operators from resorts, liveaboards and guesthouses take advantage of the naturally occurring phenomenon by leading excursions for guests to swim with the largest shark in the sea. A wide, shallow reef shelf makes it easy to detect the sharks swimming slowly near the surface while they are warming their internal body temperatures (J. Hancock, personal communication, November 10, 2012). Once detected, visitors have the ability to snorkel or scuba dive with the sharks as long as the sharks remain in close vicinity and relatively near the surface. Tourists from both North and South Ari atolls, and at times even further, will participate in whale shark excursions in the South Ari Marine Protected Area.

In September of 2010, Richard Rees, the director of MWSRP, wrote an article for the MPA Blog that detailed the popularity and visitation of the MPA. He said:

Over the last 10 years South Ari’s reputation as a site that can reliably provide opportunities for people to swim with whale sharks has grown and now supports one of the largest whale shark-focused tourist industries in the world attracting between 60,000 and 90,000 visitors per year (Richard Rees, MPA Blog). The industry has substantially grown since 2010, and the figures Rees provided above are a low estimate of current annual tourist visitation. Fees associated with visitation depend on
the resort or tour provider, but usually are in the $35-$300 USD per person range. While data on the total worth of the whale shark excursion industry in the S.A. MPA is not available, estimates put the total visitation revenue figure in the $7 million-$10 million USD range per year (R. Rees, personal communication, March 27, 2013)\(^6\).

This is not unlike other areas that have developed an industry around whale shark tourism. Ningaloo Reef in Western Australia, the oldest and most well known site for whale shark tourism, is credited with having the best regulation and management in the world and is used as an industry standard “best practice” model. Scientists and policy makers were able to work together to create laws and regulations that are underpinned by science and rigorously upheld (Australia’s shark tourism leads way in science and conservation, 2013). The whale shark industry in Ningaloo Reef is seasonal and runs from April until July, however, in 2006 the industry took in an estimated $6 million worth of revenue for the local economy from per year (Benn, 2012).

**Policy Issue**

The southern fringe of coral reef of the South Ari Atoll was designated a Marine Protected Area on June 5, 2009 by Directive Number 138-EE/2009/19 of the Ministry of Housing, Transport and Environment (Maldives Environmental Protection Agency [EPA], 2010). This designation marked a milestone for conservation efforts to further protect the iconic whale shark species in the country as the MPA status is the highest form of protection prescribed by the Government of Maldives, and is supported by “The Environmental Protection and Preservation Act: 4/93” (EPA, 2010).

\(^6\) This is based on a basic formula using visitation data collected by MWSRP. Visitation is estimated to be between 70,000 and 100,000 visitors each year x $100.
The declared dimensions of the MPA envisage the boundary extending 1-km seaward from the reef crest (algal ridge) of Rangali island (3°38'10"N, 72°42'18"E) up to the northeastern tip of Dhigurah island (3°32'15"N, 72°55'58"E), thereby making it the country’s largest MPA at 42-km². The objectives, defined by the EPA (March, 2010) for protecting the site were specified as the following:

- To protect and preserve an important Maldivian aggregation area for the whale shark, *Rhincodon typus*.
- To provide a means to promote and ensure the long-term conservation and protection of the South Ari ecosystem.
- To generate income for local islands through sustainable tourism, facilitating scientific research projects and fostering community focused education and conservation initiatives.

However, as of April 2013, nearly four years after the declaration of the MPA, the S.A. MPA still falls far short of meeting its founding objectives. Local islands remain on the periphery of the whale shark tourism industry, and there are few cases of income generated through tourism (much less sustainable) for local islands. The MPA is unregulated with no monitoring or enforcement of the existing S.A. MPA Regulations (Appendix A) or Tourist Code of Conduct (Appendix B). This has translated into a highly
congested reef with significant and growing vessel traffic and tourist volumes. Injuries and trauma to whale sharks caused by vessels and other anthropogenic threats are endemic.

Research shows that 40% of the whale sharks encountered in the S.A. MPA have signs of major trauma and that the majority of these sharks exhibit signs of multiple injuries sustained over their lifetimes (Bott et al., unpublished). The unregulated activities in the MPA not only threaten the sharks, but also the safety of tourist engaging in excursions. While examples of injuries to tourists are not widely known due to efforts to suppress public attention, there have been multiple incidents resulting in serious injury and death of tourists and whale shark tour guides on the reef (R. Rees, personal communication, February 1, 2013).

In order to satisfy the objects of the MPA and to ensure the sustainability of the area’s natural endowment a Management Plan for the MPA is desperately needed. Typically, a Management Plan is implemented when a government designates a particular area for protection. While multiple attempts have been made in the past to produce a Management Plan, nothing has come to fruition. MWSRP’s Director stated that this stagnation results from lack of government resources and widespread compliance from the tourism industry (September 2010)(personal communication, February 1, 2013):

Citing an acute lack of resources the Maldivian government has been unable to follow up the decision of South Ari MPA with the actions needed to develop the proposed collaborative management structure. This is unfortunate as it is an area with a huge amount of potential. With an ever-present iconic species, existing tourism infrastructure, receptive local island communities and the successful
piloting of a tourist contribution funding mechanism, South Ari has all the ingredients for a sustainable, self-financing, community led solution.

The proposed policy solution, which forms the basis of the advocacy initiative, is the adoption of a collaborative Management Plan that is community led, supported by tourism stakeholders, and self-financed.

The Advocates

The Maldives Whale Shark Research Programme is a registered charity\(^7\) in the United Kingdom that aims to conduct scientific research on whale sharks and foster community-based marine conservation in the Maldives and the Indian Ocean\(^8\). The research and organizational objectives are for the conservation, protection, and improvement of the physical and natural environments of whale sharks and marine biological diversity.

The MWSRP’s origins initially began as a three-month scientific research expedition in 2006 undertaken by conservation biologists Morgan Riley and Rodrey Lloyd-Williams. During this pilot study, the researchers sought to document the relative abundance of the species *Rhincodon typus* in Maldivian waters. At the time virtually no scientific studies of whale sharks had occurred in the country. Over the course of the expedition the researchers documented several dozen whale shark encounters; most of which occurred in the area that is now the S.A. MPA.

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\(^7\) Charity number 1130369.

\(^8\) At the time of writing this, the MWSRP was registered in the Maldives as a non-governmental organization (NGO) under the name Maldives Whale Shark Research.
Upon returning to the U.K. to analyze expedition findings, Riley and Lloyd-Williams found that there was a dearth of relevant scientific literature worldwide on the whale shark. Regardless of the fact that the whale shark is the largest fish species on Earth, very little is known about the distribution, habitat requirements, life cycle, or reproduction, thereby making it difficult to effectively conserve and establish good marine management plans that protect the iconic species (Maldives Whale Shark Research Programme [MWSRP], 2010). As a result of the initial pilot study and the overall lack of understanding of whale sharks by the global community, the MWSRP was established out of the need for further research, conservation and education of the iconic yet vulnerable species.

In 2007 the fledgling programme gained corporate sponsorship from the prestigious Conrad Maldives Rangali Island resort (part of the Hilton Worldwide family) located in South Ari Atoll. This enabled the team to base operations near the main research site along the southern fringe of reef, and provided a source of in-kind logistical and financial support. The programme at the time was run by a small, dedicated group of voluntary staff comprised of marine and environmental scientists from the U.K.

Beginning in 2008, the organization began to work in collaboration with Dr. Brent Stewart, a Senior Research Scientist at the Hubbs-SeaWorld Research Institute in San Diego, California to further scientific studies of whale sharks using archival and satellite telemetry tags. The organization became a registered not-for-profit charity in the United Kingdom in June 2009. At the time of formal establishment, Richard Rees, a conservation biologist by training, became the Director of MWSRP. At the helm of the organization, Rees has helped grow the organization and still holds the Director position as of March 2013.

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9 Whale sharks can grown as large as 20 meters (65.5 feet) and weight as much as 34 tons (Chen & Phipps, 2002)
The MWSRP currently operates in the Maldives seven months out of the year. During this time the Programme investigates the characteristics and behavioral ecology of the Maldivian whale shark population through photo identification, laser photogrammetry, prey surveys, telemetry tagging projects, and by collaborating on international genetic analysis. The programme has documented 182 individual whale sharks in Maldivian waters with the aid of research assistants and Maldivian interns that take part in a volunteer program. Other activities that the Programme conducts while in field are educational outreach programs in local communities that emphasize awareness and understanding of the marine environment (MWSRP, 2010).

All research findings by the MWSRP are furnished to the Maldivian government in the hope that policy makers can make more informed and consequential policies pertaining to conservation and marine management if accurate data is available. Achievements that have been made as a result of these efforts include the government’s adoption of the Maldivian Whale Shark Tourist Encounter Guidelines (Appendix B) developed in conjunction with industry stakeholders and the MWSRP. Additionally, the MWSRP provided the technical expertise for declaration of the S.A. MPA in 2009.

Since the declaration of the S.A. MPA in 2009, the MWSRP has worked ardently on the adoption of a sound Management Plan that emphasizes community-based management. MWSRP’s S.A. MPA initiative has involved the production and dissemination of a variety of publications to government ministries and tourism stakeholders that include, but are not limited to: whale shark research findings, informational pamphlets on MPA management, and MPA Site Descriptions. The organization sponsored MSc Marine Biology students from Newcastle University to conduct research on various aspects on MPA management
detailing community perceptions and tourists’ willingness to pay. Proposals have also been submitted to the IUCN to fund an MPA management project.

Most recently, the MWSRP has been instrumental in the establishment of a Maldivian Community Interest Company named SAMPA that aims to build local capacity to manage the protected area, foster co-operation between island communities and tourism stakeholders, and raise local awareness of the natural endowment of the area. The IUCN now works in collaboration with MWSRP and sponsors an employee to coordinate SAMPA activities with the directive to spur the formulation and adoption of a S.A. MPA Management Plan.

While public perception and acceptance of MWSRP in the local communities that are located in the MPA (Fenfushi, Maamagili, Dhidhdhoo, & Dhigurah) is overall positive, there has been enmity shown towards MWSRP by various tourism stakeholder groups, in particular the Liveaboard Association of the Maldives (LAM). In 2009, the shark tagging conducted in conjunction with Dr. Stewart caused serious uproar by the scuba dive safari boats—known as liveaboards—because they believed the tagging upset/injured the sharks, and as a result fewer sharks were encountered in the area. MWSRP countered that the claims were unfounded and went against all empirical research findings (R. Rees, personal communication, June 2, 2012).

This friction between major tourism stakeholders and foreign scientists is in no way singular to MWSRP. Due to the powerful political influence that associations like LAM wield, foreign organizations and scientists are intensely scrutinized in the public eye. Even within the government there is much of the circumspection due to a stigma on foreign
organizations and scientists. Claims are made that these foreign entities use the Maldives as a research station, yet safeguard all findings with no regard for local benefit or even acknowledgement of the host country (R. Rasheed, personal communication, March 2, 2013).

Politics

Politics is the dynamic relationships of power influence policies. Not only does politics involve the formal institutions or individual decision makers that can directly implement, change, or absolve policies, but it also includes the “who and what” – the non-formal powers – that influence the formal decision makers (Unsicker, 2013).

For the purposes of this paper the political actors have been separated into respective categories: the Primary Target- the institution that has the legal authority to enact the policy change the advocates seek; the Ally- the other actor(s) that can directly influence the primary target (Shultz, 2002); and unique to this paper are the Influential Stakeholders. These actors are the organizational stakeholders that are central to any policies involving the S.A. MPA that wield significant amounts of non-formal power. While not in direct opposition to adopting a Management Plan for the S.A. MPA, these influential stakeholders do have the ability to influence the primary target and steer public opinion.

It should be noted that the information presented in this paper on the government of the Maldives has a limited shelf life. Internal politics are quite unsettled, and there have been significant changes occurring in the last decade. Tensions have been building since 2008 when President Mohamed Nasheed was elected, thereby ending a 30-year rule by President Maumoon Gayoom (R. Rasheed, personal communication, January 15, 2013). Nasheed then lost power in February 2012 due to a political coup d’état. There is currently
an interim government headed by Nasheed’s successor, Mohammed Waheed Hassan, while new elections are slated for September 2013. The change of the presidency has resulted in significant constitutional changes and the overall structure of government. Government ministries have been amalgamated, split, and reformed; island chiefs have been replaced with development councils; and more authoritative power rests in the hands of provincial Atoll Councils that has occurred as a result of decentralization.

For advocacy purposes pertaining to the MPA Management Plan initiative it was important to know where authority over environmental functions lied. This, however, proved to be a difficult task because the ministry with purview over the environment changed eight times in the last two decades. In 1984, matters of the environment were allocated to the Ministry of Home Affairs. Since then, environmental functions have been put under the purview of the Ministry of Planning and Development, the Ministry of Planning and Environment, the Ministry of Home Affairs, Housing and Environment, the Ministry of Environment and Construction, the Ministry of Environment, Energy and Water, the Ministry of Housing, Transportation and Environment, and finally, the Ministry of Environment and Energy (Emerton et al., 2009).

Primary Target.

Marine Protected Areas in the Maldives fall under the governmental domain of the Environmental Protection Agency. The EPA, led by Director General Ibrahim Naieem, is a legal regulatory entity under the umbrella of the Ministry of the Environment and Energy. The EPA, and accordingly the Director General, is the main target of the advocacy initiative because it is by their legal authority that a management plan for the S.A. MPA can be signed
into law. The environmental agency was chosen as the primary target because MPAs would still fall under their jurisdiction even if the overarching ministry were changed as a result of the September 2013 presidential election.

Although no other statutory entities or ministries would be legally necessary to promulgate a Management Plan, it would require support and acceptance from other institutions such as the Ministry of Tourism, Arts and Culture, the Ministry of Fisheries and Agriculture, and the Marine Resources Centre before the EPA would sign the Management Plan into law.

*Ally.*

In 2012, the IUCN started working in the Maldives on various programs related to marine conservation and marine management as part of a larger Indian Ocean program. One of the focal areas was (and still remains) sharks and rays research and conservation. It was during this time that the MWSRP started working in an alliance with the IUCN on several research related programs. The employment of local marine biologist, Rifaee Rasheed, in September 2012 helped to stabilize a collaborative relationship between the two organizations. Under the agreement, Rifaee became a joint employee of both organizations with work responsibilities focused on the S.A. MPA and the objectives of SAMPA.

The alliance with the IUCN has enabled greater lobbying power for the MPA advocacy initiative. The IUCN has a more political clout than MWSRP and has helped with technical expertise, fundraising, and most importantly, building the institutional support of adoption of the Management Plan between important organizations and governmental agencies including
powerful ministries such as the Ministry of Tourism, Arts and Culture. Another important aspect of the alliance with the IUCN is that the MWSRP is no longer the sole organization pushing for more stringent regulation and monitoring of the MPA.

**Influential Stakeholders.**

There are many stakeholders in the MPA, and each holds varying degrees of influence in respect to advancing a Management Plan. In respect to local communities, there are four local communities located in direct proximity of the MPA, each with respective development councils. The island councils are overseen by the South Ari Atoll Council, which comprised of elected officials from each inhabited island. The councils, however, do not greatly influence the decision of adopting a Management Plan and are in favor of increased management, especially if it translates into greater revenue for local

---

10 The South Ari Atoll Council President has verbally confirmed that he is in support of a Management Plan for the S.A. MPA, but without national backing, this is only a small piece of the puzzle (R. Rees, personal communication, February 7, 2013).
communities. The councils’ power lies more in the structure and implementation of the Management Plan if it were to be passed.

As previously mentioned, the largest non-formal influence comes from the tourism industry. A Management Plan would directly affect the tourism stakeholders’ current operations by regulating access to the MPA in some capacity. There are 14 resorts alone located in South Ari that are known to frequent the S.A. MPA for whale shark excursions, and each resort has a General Manager, a third party scuba dive center, and their respective owners that all have varying levels of influence over the decision to adopt a Management Plan. Of the 14 resorts located in South Ari, the most influential actors are the General Managers and owners from resorts that reside in the MPA. These resorts are listed below in Table 1.

Table 1

Tourist Resorts in S.A. MPA

<table>
<thead>
<tr>
<th>Resort</th>
<th>Ownership</th>
<th>Dive Center</th>
</tr>
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<tbody>
<tr>
<td>LUX* Maldives</td>
<td>LUX* Island Resorts</td>
<td>Euro Divers</td>
</tr>
<tr>
<td>Conrad Maldives Rangali Island</td>
<td>Crown Company</td>
<td>Sub Aqua</td>
</tr>
<tr>
<td>Holiday Island Resort &amp; Spa</td>
<td>Villa Group</td>
<td>DiveOceanus</td>
</tr>
<tr>
<td>Sun Island Resort &amp; Spa</td>
<td>Villa Group</td>
<td>DiveOceanus</td>
</tr>
</tbody>
</table>

The dive centers at each of these resorts are represented by the diving industry’s trade association- the Dive Association of the Maldives (DAM), which wields significant non-formal influence over any policies or decisions regarding a Management Plan of the MPA. Zoonia Naseem is the current president of DAM.
The other influential tourism stakeholders are the liveaboard dive safari boats. In the past year and a half there have been 94 individual liveaboard vessels documented engaging in whale shark excursions with tourists. Independently these vessels do not hold much political power, however, their trade association is one of the most influential tourism bodies in the country. President Ahmed Zubair Adam currently leads this association, the Liveaboard Association of the Maldives (LAM), and has stated that LAM is not in opposition of a Management Plan for the S.A. MPA if scuba diving is still permitted. However, Adam has threatened to stymie the adoption of a Management Plan if the IUCN does not assist in lobbying the Ministry of Tourism, Culture & Arts for the expansion of rights for liveaboards to use recreational areas (most notably picnic islands and surf breaks) located throughout the country (R. Rasheed, personal communication, February 13, 2013).

**Strategy**

The development and adherence of a strategic plan that clearly outlines a direction that advances the advocating organization’s objectives is essential to nearly all policy advocacy campaigns (Shultz, 2002). The strategy must take into account the context of the advocacy; organizational capacity; the policy problem and solution; the political systems; as well as the influential actors (Unsicker, 2013). A strategy helps to align the advocates to begin the “policy cycle” (Figure 3). The strategy can then serve as an adaptive guide to bring the policy issue to attention of the policy makers, convince them of the desired change, and then have it implemented and then evaluated for further adaption (Unsicker, 2013, p. 130). The S.A. MPA Management Plan advocacy initiative was at the initial “Agenda Setting” stage.
The process of developing a coherent strategy was particularly important for MWSRP because it helped to assess previous efforts, understand the initiative’s history, and spotlight areas needed for IUCN intervention. There were considerable documents and other communications published that detailed MPA establishment and potential plans for a management structure when the area was first declared an MPA in June 2009. These works, however, were not immediately accessible to me while working on the advocacy initiative. It was not until Rees made available the previous MWSRP efforts and publications that a strategic plan could be loosely formed after detailed analysis.

The following list details the steps that MWSRP followed from November 2012 to March 2013 that helped advance the overall objective of the advocacy initiative. While the steps appear to be quite linear it should be noted that it was an iterative process that was influenced by other programs and research the MWSRP was conducting.
Table 2

Advocacy Strategy Plan

<table>
<thead>
<tr>
<th>Action</th>
<th>Objective</th>
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</table>
| 1. Institutional Reflection & Visioning | • Understand the political position of MWSRP  
• Formalize the advocacy objective  
• Highlight strengths/weaknesses of the organization  
• Develop roles for team members |
| 2. Policy Research & Analysis       | • Understand the current state of the MPA  
• Identify the problem and its roots |
| 3. Identify Political Actors        | • Identify political actors and influential stakeholders  
• Identify target(s)  
• Develop a power map |
| 4. Develop Message                  | • Develop a clear and intelligible message with data from research for decision makers |
| 5. Present Message to Target (EPA)  | • Present the Message (a Portfolio of research findings)  
• Get feedback on a formidable action plan for the MPA |
| 6. Evaluate Feedback                | • Decide upon a directed course of action based on meeting with the EPA  
• Decide upon scope of work for all parties |
| 7. Build Institutional Support      | • Rely upon ally (IUCN) to build institutional support with Ministry of Tourism, Arts & Culture, Ministry of Fisheries, LAM, DAM, and Marine Research Centre |
| 8. Develop a Vision Document (The Product) | • Produce a Vision Document consistent with past framing that outlines the potential outline and steps needed for a Management Plan to be implemented |
**Concepts & Methods**

A multiplicity of sources was consulted for research purposes that aided in the production of the *Vision Document* as well this paper. It should be noted that a significant amount of insights and ideas that went into the advocacy efforts that culminated in the production of the Vision Document were the result of informal discussions with MWSRP’s founding Director, Operations Manager, and Marine Biologist- Richard Rees, James Hancock, and Rifaee Rasheed, respectively. From these discussions significant insights were gleaned on institutional history, contextual details pertaining to the Maldives (culture, politics, economy, environment), and technical expertise on MPA management. These discussions and personal observations formed the basis of the research and provided a compass for the overall advocacy strategy.

It was important to gather information about MWSRP, the organization’s programs, and it’s history (institutional and past advocacy efforts) in order to work on the advocacy initiative. The primary sources for institutional knowledge came from discussions with the Director and Operations Manager at MWSRP; personal observations made while coordinating and conducting whale shark research in the MPA; and the analysis of MWSRP internal documents including the organization’s Annual Reports and past project proposals. These documents helped to construct a sequential timeline of events that was beneficial to the understanding the organization’s political influence.

In order to understand the context of the advocacy initiative the following primary sources were used: personal observations while living and working in the Maldives; discussions with government officials from the EPA and MRC; and discussions with Maldivian volunteers with the MWSRP and Rifaee Rasheed, MWSRP’s marine biologist from
the Maldives. Secondary literature that detailed government structure, governmental statistics, and local communities came from The President’s Office of the Republic of Maldives website (http://www.presidencymaldives.gov.mv), and Isles: The Provincial Information Management System website (http://isles.egov.mv).

The research and methods used to create the Vision Document came from the primary sources Marine and Coastal Protected Areas: A Guide for Planners and Managers (Salm, Clark & Siirila, 2000) and literature on the Atoll Ecosystem Conservation Project and the Hanifaru MPA in Baa Atoll (EPA, 2011). Significant insights for the Vision Document were gleaned from secondary literature sources on the subjects of management and policy advocacy. The secondary literature source on management that proved to be a salient guide that molded the advocacy's methodology was the book The Power of Collaborative Solutions by Tom Wolff (2010). This book planted seeds on the importance collaboration and democratic processes that are reflected in the need for community and stakeholder participation in drafting a Management Plan.

Secondary literature sources on policy advocacy included the works of Unsicker (2013), VeneKlasen & Miller (2007), and Shultz (2002). These publications also played a significant role in directing the methodology that was used to create the Vision Document. This cross-pollination occurred because of the relevancy of policy advocacy approaches that helped shaped the structure and language of the Vision Document as well as the strategic plan used to produce it.

An example of this can be seen in the language used in the Vision Document. It was assumed that the primary target(s) in this instance would most likely be non-native English speakers since the document was intended for Maldivian government officials. It was
because of this assumption that a deliberate decision was made to craft the language of the document to be markedly less technical than other science-based publications produced by MWSRP. This was meant to intelligibly get the message across while limiting any anticipated interference of interpretation.

Framing of the message was another important aspect of the Vision Document that had to be carefully measured. Analysis of previous advocacy efforts on behalf of MWSRP for heightened regulation of the MPA centered on the safety of whale sharks and the potential benefits to local communities. Since these efforts produced negligible results it was decided to subtly redirect the message to link human safety of tourists engaging in whale shark excursions to the need for an MPA management plan. In order to achieve this the message was re-framed by sculpting the language of scientific research findings to highlight the threat to tourist safety. This new frame will hopefully make it easier for the EPA to champion when presenting the plan to other ministries, particularly the powerful Ministry of Tourism, Arts & Culture.

The Product

The Product, titled South Ari atoll Marine Protected Area: Vision Document, has been interpolated into this paper and can be found on the following 12 pages (p. 34-45). The intent of the publication was to provide decision makers with a roadmap for the promulgation and implementation of a Management Plan for the S.A. MPA.

The document’s formatting has been altered from its original version in order for assimilation into this paper. Accordingly, the pagination of the Vision Document is consistent with the overall paper and not its own independent numeration. However, the
page numbers that are cited in the Table of Contents in the *Vision Document* reflect original pagination. The original document was disseminated in PDF electronic form in order for ease of transmission.
Collins, N., Hancock, J., & Rees, R.

South Ari atoll Marine Protected Area: Vision Document

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Keywords: South Ari, whale sharks, community management, coastal and marine protected areas

Acknowledgements: This document is based upon research findings from the Maldives Whale Shark Research Programme (MWSRP) and preliminary survey results from the International Union for Conservation of Nature (IUCN). It has been produced to further conservations pertaining to formal management of the S.A. MPA after discussions between the MWSRP, IUCN, Marine Research Center and the Maldives Environmental Protection Agency on February 9, 2013. Support and guidance from the IUCN has enabled the possibility of establishing active steps in formulating a Management Plan for the S. Ari MPA. Without their support, this paper would not have been able to be written.
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## List of Acronyms

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AEC</td>
<td>Atoll Ecosystem Conservation Project</td>
</tr>
<tr>
<td>DAM</td>
<td>Divers Association of Maldives</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for the Conservation of Nature</td>
</tr>
<tr>
<td>LAM</td>
<td>Liveaboard Association of Maldives</td>
</tr>
<tr>
<td>MPA</td>
<td>Marine Protected Area</td>
</tr>
<tr>
<td>MWSRP</td>
<td>Maldives Whale Shark Research Programme</td>
</tr>
<tr>
<td>S.A. MPA</td>
<td>South Ari atoll MPA</td>
</tr>
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</table>
Preamble

The southern fringe of coral reef of the South Ari (Alif Dhaalu) atoll was designated a Marine Protected Area on June 5, 2009 by Directive Number 138-EE/2009/19 of the Ministry of Housing, Transport and Environment. The Marine Protected Area (MPA) status is the highest form of protection prescribed by the Government of Maldives and is supported by “The Environmental Protection and Preservation Act: 4/93”.

The declared dimensions of the MPA envisage the boundary extending 1 km seaward from the reef crest (algual ridge) of Rangali Island (3° 38’10N, 72° 42’18E) up to the northeastern tip of Dhigurah Island (3° 32’15N, 72° 55’58E). The purposes of protecting the site were:

- To protect and preserve an important Maldivian aggregation area for the whale shark, *Rhincodon typus*.
- To provide a means to promote and ensure the long-term conservation and protection of the South Ari ecosystem.
- To generate income for local islands through sustainable tourism, facilitating scientific research projects and fostering community focused education and conservation initiatives.

The declaration of the S. Ari atoll MPA was significant in that it furthered steps towards the conservation of critical habitats for the whale shark in the Maldives. The whale shark has been protected in the Maldives since June 24, 1995, and has been included in the Annex I of the United Nations Convention on the Law of the Sea (UNCLOS), under Appendix II of the Convention on International Trade in Endangered Species (CITES), under Appendix II of the Convention of Migratory Species (CMS), as well as being categorized as *vulnerable* to extinction on the IUCN Red List of Threatened Species.

As of February 2013, nearly four years after the declaration of the MPA, the South Ari atoll Marine Protected Area still lacks a sound Management Plan and the resources to implement it.
Introduction

The Ari Atoll is of great economic importance for the tourism sector in the Maldives, as 85% of all tourist resorts are located within the atoll. In addition to resorts, liveaboard scuba dive safari boats frequent Ari Atoll for recreational diving and snorkeling excursions. The South Ari Atoll Marine Protected Area (S.A. MPA) that extends over the southernmost 42-km2 coral reef habitat in the atoll is the largest MPA in the Maldives. It is an area that represents one of the world’s most significant sites for whale sharks due to their presence 12 months out of the year. The area also boasts high biological diversity for marine mega fauna, which resorts and liveaboards capitalize on by frequenting the MPA to run marine-based excursion trips with guests. However, without any monitoring or management, questions of both safety and sustainability are raised due to the burgeoning yet unregulated industry. Implementation of a sound Management Plan is imperative to ensure the wellbeing of tourists and the whale sharks, as well as the natural endowment of the area.

Based upon the success of the Atoll Ecosystem Conservation Project (AEC) in Baa Atoll, direction is being taken to implement a similar system, (whilst acknowledging that the two MPA’s pose different management challenges), for the conservation and management of the S.A. MPA. Furthermore, this plan would seek to secure benefits that would go towards the development of the atoll and its peoples. This paper outlines a vision for the establishment of a collaborative Management Plan\(^{11}\) that adheres to the IUCN Guidelines for Protected Areas (Category IV), as well as the methodologies put forth in the Convention for Biological Diversity’s *Ecosystems Approach*.

Goals & Objectives

1. Goal

To establish a collaborative Management Plan that ensures long-term biological, economic, and social sustainability of the S.A. MPA and atoll.

2. Objectives

The following objectives pertain to the formulation of the collaborative Management Plan. As such, they are not meant to replace the three overarching purposes for the

\(^{11}\) The IUCN defines ‘collaborative management’ as that of the decision-making authority and responsibility rest with one agency. However, the agency is required – by law or policy– to inform or consult other stakeholders (IUCN, Guidelines for Applying Protected Area Management).
designation of the MPA (See Page 5), but are meant to bolster the existing foundation.

1. To foster community engagement and participation in management and conservation activities
2. To develop a sustainable funding mechanism based upon short-term and long-term contributions from stakeholders and donors
3. To protect natural resources related to biological diversity and ensure maximum use for the public’s good
4. To establish an atoll-wide conservation and development plan that is designed to enhance key areas of livelihood generation and resilience
5. To increase scientific research and educational activities in the S. Ari atoll

**Organizational Structure**

**1. Implementing Bodies**

Marine Protected Areas fall under the government domain of the Environmental Protection Agency (EPA) in the Maldives, and accordingly, the EPA needs to be the organisation to promulgate the finalized version of the Management Plan. That being said, the genesis behind the MPA is that it will be established as a democratic, community managed area with a legitimate Management Plan that articulates the communities’ vision.

The creation and sustainability of a collaborative Management Plan, does however, require technical expertise. The MWSRP envisages the roles of assisting organisations as that of facilitators and technical advisors that will enable communities located in S. Ari and stakeholders to collectively formulate a Management Plan that will be endorsed at the national level. The primary organisations that can provide technical guidance to establish the S.A. MPA as a collaborative, community-managed area are the IUCN, MWSRP and SAMPA C.I.C.12

**IUCN**

Technical expertise such as resource mapping and zoning using geospatial information is needed from the IUCN. The data used for this will come directly from local communities and tourism stakeholders collected by surveys and workshops conducted conjointly by IUCN/ SAMPA. Examples of this include core whale shark and mega fauna zones provided by MWSRP; scuba diving and picnic area sites provided by LAM, DAM, and tourist resorts; and fishing areas used by local

12 SAMPA C.I.C is a recently formed Maldivian NGO (pending registration) that supports local communities in marine resource management in the South Ari atoll
fishermen. The workshops will provide formal trainings to disseminate essential concepts related to natural resource management in order for community members and leaders to make effective long-term decisions.

**MWSRP**

The MWSRP can provide sound scientific understanding of the area as well as provide a framework to collaboratively train excursion operators / MPA rangers. Furthermore, technical services such as collating community and stakeholder input into a Draft Management Plan and assistance in a long-term MPA monitoring can be provided by the MWSRP.

**SAMPA C.I.C**

SAMPA will be the point of contact for all activities and information regarding the MPA. The mission of the organisation will ensure continued community and stakeholder participation and understanding of the MPA, so as to form the foundation for a sustainable and adaptable management of the area. A core MPA managing body and an Advisory Committee, supported by the Atoll Council and EPA, will be established through SAMPA facilitation. Formal workshop trainings, such as community-based monitoring and island surveys, will also be conducted through the community interest company.

**2. Sustainable Funding Mechanism**

An important element of the Management Plan will no doubt be the funding mechanism that is used to sustain management activities and contribute to the development of the atoll. It will be critical to involve all stakeholders in this process to ensure maximum compliance and participation. There are several different models that will be useful to reference in the establishment of a hybrid structure unique to S. Ari. Due to the political influence that the various tourism associations yield, it is imperative to ensure a system that is just and transparent.

**3. Governance**

The anticipated governance model for the S.A. MPA involves government bodies at national and provincial level. A central fund at the provincial (atoll) level will control and distribute revenue generated by a funding mechanism dictated by MPA usage and/or direct contribution.

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13 The existing guidelines for whale shark encounters in the Maldives were established by the MWSRP in cooperation with the whale shark tourist industry in 2009, which are now widely accepted in other areas such as the Hanifaru MPA in Baa atoll.
According to the governance matrix provided in the IUCN’s Guidelines for Protected Areas, the S.A. MPA would currently most likely fit under governance type ‘A’ ‘Governance by government’ sub–type ‘Sub-national ministry or agency in charge’. It is envisaged that community and stakeholder participation will ensure the MPA’s sustainability, therefore, emphasis should be to overlap with, or transition across to, governance type ‘B’ ‘Shared Governance’ sub-type ‘Collaborative Management’. The governance structure that does take place needs to ensure that the management process is adaptable if needed.

Research Findings

The MWSRP have conducted search transects for whale sharks in Ari Atoll since 2006. At the inception of the S.A. MPA in 2009, the MWSRP commenced with incidental observations of mega fauna and MPA visitation, in addition to in-depth whale shark research, with an aim to provide basic baseline data to MPA decision makers in lieu of commencement of formal monitoring. The IUCN, SAMPA and Newcastle University MSc Students have additionally conducted surveys into Community perceptions and awareness surrounding the MPA.

Vessel Traffic & Safety

While no formal studies of the MPA vessel frequency has been undertaken the MWSRP has made incidental observations of vessel traffic during routine whale shark surveys at the request of the EPA. A large increase in the amount of vessels conducting whale shark excursions in the MPA has been observed, an overall 92.6% of all vessels traffic in the area are related to whale shark tourism.

Pressure to provide guests with an in-water whale shark experience has meant widespread non-compliance to points in the code of conduct referring to vessel speed, the distance between vessel and whale shark and one vessel per shark and as a result guest safety is compromised. In an attempt to deploy guests as close the whale shark as possible vessels consistently fail to maintain safe distances to snorkelers in the water and contact is inevitable. Although cases of serious injury to swimmers have occurred infrequently, the risk of serious injury and death is very real (in 2009 a serious head injury was sustained through a collision with a jet ski) and is in no way being mitigated.

Whale Shark Abundance

Since 2006, over 1800 whale shark encounters have been recorded in the S.A. MPA by the MWSRP, et al. Corresponding GPS locations, date, time, climatic / subsurface conditions, lunar state, and human interaction related variables were all recorded
for each shark encounter. These encounters are comprised of 182 individual sharks that have continuously returned to the area.

**Anthropogenic Threats to Whale Sharks**

Recent findings show that nearly 65% of all the sharks encountered in the S.A. MPA exhibit signs of scarring due to injuries involving boat strikes. The majority of the sharks have been documented to reveal multiple injuries, with the most serious occurring from vessel propeller wounds. These findings are significant when juxtaposed with data on increased vessel traffic and excessive speeding on the reef. Due to the sheer amount of snorkelers in the water at any given time on an encounter, combined with the high frequency of vessel traffic in the MPA, whale shark habitat and behaviour is severely interrupted. One must assume that overtime these factors / threats will result in the likely possibility of fewer, and short whale shark encounters in the short-run; with even the possibility of whale sharks ceasing to frequent the area all together in the long-term.

**Mega-Fauna Habitat**

The S.A. MPA is an important region for many marine species, least not the whale shark. Species of various classes, referred to as mega fauna, have been observed by the MWSRP in respective areas of the protected area. These classes are defined to cetaceans, turtles, billfish and elasmobranchs. Of these, several species routinely observed- the hawksbill (*Eretmochelys imbricata*) and green turtle (*Chelonia mydas*)- are listed as critically endangered and endangered respectively, on the IUCN’s Red List of Endangered Species. Occasional sightings of oceanic marine mega fauna and other migrants are observed in proximity to deep ocean water, while the rich coral reef and near shore pelagic habitats are a haven for more familiar species where they are found in high abundance.

**Community Perceptions & Attitudes**

In order to assess the attitudes and perception of locals living within S.A. MPA proximity, surveys were conducted on two inhabited local islands– Dhidhdhoo and Dhigurah.

Although many community members did not know of specific regulations that governed the MPA, most locals surveyed were aware that their respective island was situated on, or bordering a protected area. All community members on both islands that participated in the survey stressed the need for a management plan that would channel money into their respective communities. No specific avenues were given as to how this could be implemented. All surveyed were supportive of establishing a management plan that would employ locals as rangers in the area. They also believe that once a proper management plan is established, all
stakeholders that use the area will comply with the regulations. All peoples surveyed underscored the urgency to establish a Management Plan, and almost everyone expressed their frustration on how nothing has been done regardless of the numerous surveys that have been conducted.

**Further Research Required**

The following is research that is still required to establish a Management Plan:

- Resource and area use by communities
- Resource and area use by stakeholders
- Willingness to Pay on behalf of Stakeholders
- Benthic and other geospatial studies including habitat mapping
- Initial assessment of stresses and threats to the MPA’s habitats and natural resources

**Action Plan for Implementation**

1. Workshops with the local communities on resource use, natural resource management concepts, and structures of potential MPA management (identify community leaders that will be responsible for MPA management)

2. Workshops with stakeholders on resource and area use

3. GIS and resource / habitat mapping (including zoning)

4. Workshops with communities and stakeholders about findings

5. Collect stakeholder input on funding mechanisms

6. Draft Management Plan to be written

7. Present Draft Management Plan to local communities and stakeholders

8. Formally establish MPA management structure and advisory committee

9. Gazette Management Plan
Appendix

1. Map of S.A. MPA
Evaluation

This section focuses on the evaluation the Product and my contribution to the advocacy initiate. I make the delineation between contribution and the Product because I think it is important for an evaluation to go beyond the tangible product to incorporate a more holistic view that examines the dynamic relationship between the advocate, the initiative, and the organization.

Since the MPA advocacy initiative is still underway, thereby making it difficult to definitively measure the outcome by a change in policy, I believe the best approach is to understand how the advocate, the initiative, and the organization were able to interpret and adapt to the ever-changing political arena. Teles and Schmiit suggest in their article “The Elusive Craft of Evaluating Advocacy” that it is important to evaluate the advocates, not the so much the advocacy. They go even further to say that the “…proper focus for evaluation is the long-term adaptability, strategic capacity, and ultimately influence of organizations themselves.” (n.d., p. 42)

As a newcomer to MWSRP without an in-depth understanding of the institutional history it was important to take the time to research and understand the process of how the organization got to its current standing. Although it took a significant amount of time and energy to gather and analyze information regarding MWSRP’s programs, past and present research, and the various publications that the scientists have produced, it would have been much more difficult, as an advocate, to conceptualize any advocacy plans without this general knowledge.
What the effort provided was a much clearer understanding of the context in which MWSRP operates, and how this influences the scope of influence the organization wields.

Significant effort was spent gathering anecdotal information from the directors of MWSRP and developing a roadmap for the future. The visioning for the advocacy initiative proved fruitful as it allowed for a free exchange of creative ideas imperative to the development of an overall strategy. What resulted from this was a comprehensive product that accounted for, and addressed, the complex political landscape. I am, however, critical of the fact that a long-term plan for MWSRP’s role in the initiative was not developed. A theory of change that accounted for multiple “what-if” scenarios could have provided a more concrete action plan for the future, especially if the Vision Document fails to result in a positive outcome.

The Product required multiple drafts due to the nature of the proposed policy change. The policy outcome that the advocates sought was a Management Plan to be crafted from community and stakeholder input and then formalized into law. In theory this sounds simple, however, in reality the process to advocate for this proved to be much more difficult. The message to the EPA needed to be framed in a manner that persuasively called attention to the underlying reasons why action needed to be taken while simultaneously asking for community and stakeholder buy-in. This proved difficult because natural inclination was to write a Vision Document that provided substantial details of MWSRP’s version of an “ideal” Management Plan.
The final version of the Vision Document was professional in appearance, concise, and was written with appropriate language for the intended audience. The document remained informative without any provocative material that attributed blame to any one party or agency over questionable conduct in the MPA and the lack of prior adoption of a management plan. This was particularly important because of the precarious nature of politics, and any finger pointing could have escalated the matter to be wrapped up in party politics.

While the production of the Vision Document was well planned and executed, I do think that it failed in a major area. A considerable amount of thought was put into analyzing MWSRP’s data on MPA tourist visitation and assigning a precise economic valuation of the whale shark tourism industry in the area. It was decided that it would be counterproductive to “lead” with the economic benefit, and that it was important for the community to have ownership of the management without the sole purpose being financial motivation. Where I think we as advocates failed is that we conflated the policy decision makers with local community members. After careful analysis of other conservation projects in the Maldives, it seems imperative for the government to be aware of economic valuations of marine ecosystems and biodiversity if they are going to support more conservation initiatives.

I believe that if an independent evaluator were to evaluate this advocacy initiative then she would find that overall the message is more unified from previous MWSRP efforts. She would most likely conclude that the Product presents an actionable plan that includes stakeholder input and advance progresses on the
overall initiative. However, what an external evaluator might not be able to detect would be the overall shift in momentum that occurred internally within MWSRP.

For a grassroots organization with limited resources to continue this initiative after four years of stagnation it took considerable effort to sustain. The mere fact that MWSRP now has IUCN as a powerful organization backing the initiative, and that the EPA has solicited MWSRP to produce a document with an overall vision and action steps has helped gain tremendous momentum within the organization. While hard to quantify, this momentum has helped to give hope to the advocates that a sound Management Plan that incorporates community and stakeholder buy-in will be signed into law and implemented in the near future.

**Lessons Learned**

As a person that started working MWSRP with sparse knowledge on marine or natural sciences the learning curve to work on the initiative was steep. It was important to become well versed in the technical language used by the scientific community to fully understand the extent of the organization’s programs and research findings. This ability to make it easier to analyze, interpret, and translate technical literature pieces that were important to the organization and the advocacy initiative. While many of the learning lessons I experienced working on this initiative are particular to the work of marine management, most of the seminal learning lessons are quite general and can be applied to a vast amount of advocacy campaigns on various topics. The lessons learnt are listed as follows:
• Advocates must be passionate about the work they are engaged and able to be patient for any substantial results or outcomes.

• Community-based management is an approach to marine management, therefore it is important to fully understand the importance of stakeholder input and community buy-in. Without the democratic decision making process the chance of stakeholder acceptance is dramatically lowered.

• It is important to understand the how to present a message that is appropriate to respective audiences.

• Deliberation and prudence is critical to working in a political landscape that has many actors that wield significant non-formal power.

• An ally does not have to be solely considered a person or organization that can influence the primary target of an advocacy campaign. An invaluable ally can be a person or organization that can influence public opinion about the advocating organization and their work, even if it is unrelated to the policy advocacy.

• Ensure that open dialogue is created with close strategic allies so that work is not conducted in a vacuum.

• While it maybe enticing to allure communities to adopt a Management Plan based on potential revenue streams, it undermines long-term community ownership of the preservation of the natural endowment of the area.

This list is merely a synopsis of the learning that took place for me personally. I am certain that some, if not all, of these lessons were also learnt by my colleagues at
MWSRP and as an organization. Because of this, I feel that we all have emerged as stronger advocates and professionals working in the arena of conservation and marine management. The learning does not stop here though. Advocacy, like life, is an iterative process and new experiences deepen the understanding of prior endeavors. I am sure that many months and years from now I will reflect upon this experience and gain new insights. Like the famous Danish philosopher Soren Kierkegaard once noted, life can only be understood backwards, yet we can only live it forwards.

The work in the Maldives has indubitably changed my life forever. The passion the MWSRP team has towards conservation and life itself is contagious and inspiring. I cannot thank them enough for taking a chance and making me part of the team. Before my first trip to the Maldives I had only heard of a whale shark from other scuba divers. None of the stories, however, came close to the awe and amazement I experienced every time I was fortunate enough to swim with these magnificent creatures. The sharks have opened my eyes and my heart to the world, and for this I feel honored and incited to champion their well-being and ultimate survival. I can only hope that my efforts will make a difference.
Bibliography


Appendix A – South Ari Atoll MPA Regulations

Commencing from 5th June 2009, the following activities are prohibited within this South Ari Atoll MPA.

1. To carry out any activity which could lead to destruction or alter the site/habitat or the living and non-living things within that environment.
2. Coral and sand mining.
3. Disposal or dumping of any materials.
4. Anchoring except in an emergency situation which is life threatening or leading to destruction of the vessel.
5. No person entering the protected area is allowed to disturb or tamper whale shark or any other fauna. A person entering the sea to watch whale sharks must at all times maintain a distance of at least 4 meters from the whale shark.
6. The speed limit within this protected area should not exceed 10 nautical miles.
7. No vessel should come closer than 10 meters to the whale shark
8. No vessels larger than 20 meters overall length should be engaged in any activity within the MPA
9. Safari vessels, vessels with overall length greater than 20 meters and using of jets skis are prohibited.
10. Catching, collecting or killing of any fauna especially birds
Appendix B – Maldivian Whale Shark Tourist Encounter Guidelines

CODE OF CONDUCT

1) Restriction on vessels in or near contact zone:
   
a) An exclusive contact zone of a 250 meters (820.2 feet) radius applies around any whale shark.

b) A vessel establishing a contact zone should identify itself by raising the designated flag.

c) Any other vessel engaging in whale shark related activities must not enter a contact zone to observe a whale shark.

d) The operators of a vessel establishing a contact zone shall record the details of the contact on the form provided and return this to the appropriate authority within the time specified.

2) Restrictions on period in contact zone:
   
a) A contact vessel must not remain in the same contact zone for longer than 40 minutes if there are other vessels queuing to view the shark.

b) Notwithstanding clause 2 (1) above, the contact period is deemed as having ended once the contact vessel has lost contact with the shark and should lower the contact flag indicating that the contact zone and contact period have lapsed.

3) Restrictions on vessel speed in contact zone:
   
a) Subject to clause (2 & 3) below, a contact vessel must not exceed 5 knots (9.3km/hr.) in a contact zone.

b) A contact vessel must not exceed 2 knots (3.7 km/hr.) within 50 meters (164 feet) of the contact whale shark.

   c) If, for reasons of safety, a contact vessel must exceed 5 knots (9.3km/hr.) in a contact zone, that vessel must leave the contact zone as soon as is practicable.

4) Proximity of contact vessel to the whale shark:
a) A contact vessel must maintain a distance of at least 10 m (32.8 feet) from the nearest whale shark.

b) Should a whale shark swim towards the vessel to within 10 m (32.8 feet), all engines should be in neutral or switched off until the shark has moved more than 10 m away from it.

5) **Direction of approach:**

a) Subject to clause 3 (1 & 2) if swimmers or divers are to enter the sea from a contact vessel to view a whale shark, the contact vessel should wherever possible approach a whale shark from in-front or from the side without the vessel forcing the shark to change direction.

6) **Number of swimmers or divers:**

a) The number of swimmers or divers entering the sea from a contact vessel to view a shark is limited to a maximum of 12 persons in total.

7) **Physical contact with whale shark prohibited:**

a) A person must not touch or ride on, or attempt to touch or ride on, a whale shark under any circumstance.

8) **Proximity of swimmers or divers to the whale shark:**

a) A person in the sea must at all times maintain a distance of at least:
   - 3 meters (9.84 feet) from the head or body of the whale shark, when approaching a whale shark from any direction; and
   - 4 meters (13.1 feet) from the tail of the whale shark, when approaching the tail from any direction.

b) Must not deliberately cross in front of the whale shark’s direction of travel or impede its movement.

9) **Motorized swimming and other activities prohibited:**

A person in the sea must not:

a) Use a motorized or otherwise powered swimming or diving aid in a contact zone.

b) use any device capable of towing or carrying a person that is towed behind a vessel, in a contact zone.

c) use flash photography.
10) **Exceptions when authorized by the authorized Government Agencies:**

a) Clauses 5, 7, 8 and 9 do not apply to a person who is undertaking authorized scientific research. Authorized scientific teams should also adhere to their allocated timings provided in the permits and should collect their deployed equipment prior to leaving the MPA.
Appendix C - World Location of Maldives

Source: http://www.turkey-visit.com/map/maldives/map_of_Maldives.gif
Appendix D – Map of the atolls of the Maldives
Appendix E – Map of the South Ari MPA
Appendix F – Original Proposal Presented to the EPA

South Ari Atoll MPA Management Proposal
Maldives Whale Shark Research Programme
Maldives Environmental Protection Agency
International Union for the Conservation of Nature

February, 2013
Appendix G – Example MWSRP Research Activity

Measuring the whale shark using a tape measure while free diving.
Appendix H - Whale Shark Injuries from Boat Strikes

These photos were collected by the MWSRP during research transects in or near the South Ari Marine Protected Area.
Appendix I – Personal Communication List

This list includes the names, titles, and dates of the persons that were consulted for primary and secondary data that was used in the production of this paper.

Richard Rees
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Dates of personal communication cited in paper:
  • June 2, 2012
  • February 1, 2013
  • February 7, 2013
  • March 27, 2013

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Dates of personal communication cited in paper:
  • November 10, 2013

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Dates of personal communication cited in paper:
  • January 15, 2013
  • February 13, 2013
  • March 2, 2013