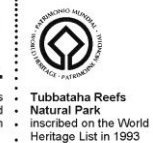


Tubbataha Reefs Natural Park and World Heritage Site Comprehensive Tourism Management Plan 2013



PHOTO: YVETTE LEE

12/9/2013
Tubbataha Protected Area Management Board
Tubbataha Management Office



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Executive Summary



UNESCO Tubbataha Reefs Natural Park Outstanding Universal Value:

“Tubbataha Reefs Natural Park lies in a unique position in the center of the Sulu Sea, and includes the Tubbataha and Jessie Beazley Reefs. It protects an area of almost 100,000 hectares of high quality marine habitats containing three atolls and a large area of deep sea. The property is home to a great diversity of marine life.



The Outstanding Universal Value of the Tubbataha Reefs Natural Park (TRNP) immediately subjects it to the interest of the public. The increasing number of visitors to the park each year attests to the public interest with more visitors expected to see the park in the coming years.

Through the years, tourism management in the TRNP has become a major part of its operation as implemented by the Tubbataha Management Office (TMO). Although focused on SCUBA diving, the main tourism activity on the site, it is expected that activities within the park will expand as tourism develops and visitor arrival to the Philippines increases.

Despite the benefits tourism brings to a Marine Protected Area in terms of revenues that is used to augment management costs and promoting environment awareness, it is widely documented that tourism activities affect corals and reef systems adversely.

This document assesses tourism in the TRNP over the years and its present role in the management of the park. This information provided the basis to create a framework and plan for the TMO that considers issues, gaps, and needs related to tourism in the TRNP.

The TRNP Comprehensive Tourism Management Plan shall be part of TRNP’s management plan to be implemented with the approval of the Tubbataha Protected Areas Management Board. Tourism is viewed not only as an important vehicle to achieve the goals of the park, but as an essential element to its fulfillment.

Sustainability is the key concept to ensure that the fragile reef ecosystem is not altered but instead making tourism the vehicle for its conservation. Sustainability is achieved mainly through proper management set-up, good partnerships with the tourism stakeholders, use of scientific information for improved management, and committed support of various stakeholders to achieve the tourism goal of the TRNP to ‘effectively manage tourism to support conservation’ of the park’s resources.

Background

The tourism in the Philippines is focused on the country's immense natural beauty and inviting national culture. A variety of tourism products cater to the growing global travel market. The Philippines' islands and seas are considered the country's major tourist attraction. Three of the nine tourism core products identified by the Philippine Department of Tourism focus on the marine environment, namely: sun and beach, cruise and nautical, diving and marine sports. The other core products are nature, educational, and cultural tourism as well as Meeting, Incentives, Congress and Events (MICE).

The Philippines lies within the Coral Triangle, the center of marine biodiversity of the world where the highest number of coral species and other marine life can be seen. At the apex of this triangle is the Sulu Sea, which the World Wildlife Fund (WWF) declared as one of the top 200 natural places on earth that are important for the survival of our planet. At its center are two atolls that form the Tubbataha Reefs.

Tubbataha Reefs was declared a protected area in 1988. Now called the Tubbataha Reefs Natural Park (TRNP), it is the only purely marine park in Southeast Asia inscribed as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Natural Site (WHNS) due to its Outstanding Universal Value (OUV) (Appendix 1). As one of the remaining reefs in the Philippines belonging to the 1% that are still in excellent condition, the TRNP is naturally a major SCUBA diver draw.

The TRNP is composed of two uninhabited atolls, the South and North Atolls, and the Jessie Beazley Reef. Both atolls have associated islets and lagoons and are separated by a 5-nm channel. Jessie Beazley Reef, which lies about 12-nm from the atolls, has an area of 45 hectares with a small islet made of marl exposed during low tide. The boundaries of TRNP are located 3-nm from the edge of these marine formations. The park is composed of more or less 10,000 hectares of coral reef and more than 86,000 hectares of surrounding waters.

The North reef has a small island called the North Islet while the South Islet is found in the South reef with a lighthouse. There is a Ranger's Station in a sandbar of the North reef where park rangers, in-charge of patrolling the area, are based. The sandy beaches of the islets are utilized as nesting beaches by female green and hawksbill turtles where they lay their eggs at night.

The outer parts of the atolls are steep with perpendicular walls extending to a depth of 100m. The shallow area is covered with mostly hard corals. The reef flats and edge are full of Acropora (stag horn) corals Montipora (velvet), Pocillopora (cauliflower), Porites (finger), Milleopora (fire), and some Faviids (moon). Corals such as Diploastrea (moon), Platygyra (brain), Pachyseris (elephant skin), Leptoseris (lettuce), and Montipora (velvet) are found in the drop-offs. Huge gorgonian sea fans, black corals, soft tree corals and barrel sponges are everywhere. A total of 80 genera of corals were recorded in Tubbataha with over 360 species identified, about 90% of all Philippine coral species.

Fish species are highly diverse and abundant. Frequenting the drop-offs are large solitary tunas, schools of barracudas, schools of jacks, and batfish. Reef sharks are so common that you see dozens of them on

each dive. Twelve shark species have been identified. Various rays are a common sight with occasional sightings of threshers and leopard sharks. There is a high probability of an encounter with manta rays and whale sharks. To date, a total of 640 species of fish have been recorded. The drop-offs are full of ledges and crevices providing resting sites for reef sharks and turtles. The hawksbill and green turtles are commonly found in the reefs.

The islets are nesting sites for both sea birds and turtles. All in all, about 100 bird species have been recorded in Tubbataha.

The two islets are breeding and rookery grounds for migratory and resident seabird species, some of which are classified as priorities for conservation. The North Islet is the breeding ground of an endemic sub-species of Black Noddy (*Anous minutus worcestri*) and an important rookery of the critically endangered Christmas Island Frigate.

Thirteen species of cetaceans have been identified in the area such as spinner, bottlenose, and the pantropical spotted dolphins, including the mighty sperm whale.

Tubbataha is exposed to yearly monsoons. The southwest and northeast monsoons create rough seas, with a week or so of calmness during monsoon breaks. Moderate winds from the northeast between mid-March to mid-June allow for regular visits to TRNP. Due to seasonal access, the park's business operation is limited to only 12 weeks in a year.

SCUBA diving is one of the country's major tourism activity allowed around its 7,107 islands and 36,289 kilometers of coastline. The Philippines' diving potential has been cited in different venues, e.g., Marine Diving Fair Tokyo as the World's Best Diving Destination. CNN Travel's 50 Best Dive Sites 2013 included the Tubbataha Reefs. The move to position the Philippines as the dive center of Asia holds much promise because of its natural environment, infrastructure, and services offered.

The Philippine tourism industry has been experiencing valuable growth with increasing trends of tourists travelling around the country. Recognized as an important driver of national economic growth, the industry has prompted a number of developments in national policies for tourism development to support its sustainable and inclusive growth. The enactment of the Tourism Act of 2009 (RA 9593) and the formulation of the National Tourism Development Plan (NTDP) 2011-2016 ensure that the Philippine tourism industry will continue to expand. The NTDP provides a framework for tourism stakeholders in the sustainable development of the industry.

In 2012, Philippine tourism has surpassed 4 million inbound tourist arrivals, a much-celebrated success that has marked the stable and substantial growth of the industry. With tourism at the forefront of development, it continues to maintain a positive outlook for growth in the coming years to reach its foreign tourist arrival target of 10 million and 35 million domestic travelers by 2016.

However, aside from the positive benefits, tourism is also known to have negative impacts to the environment. The NTDP states that "unless carefully controlled and managed, there is the real risk that accelerated tourism growth will result in further degradation of the already stressed natural

environments.” As the Philippines tries to meet the demand for new tourism attractions for its growing number of visitors and its objectives to protect natural resources, goals must be aligned with sustainable development.

Sustainable development of tourism in natural sites, especially in protected areas, is addressed by the National Integrated Protected Areas Systems (NIPAS) Act of 1992 Implementing Rules and Regulations (IRR) and the Philippines’ NTDP’s goal “to develop an environmentally and socially responsible tourism that delivers larger and more widely distributed income and employment opportunities.” Sustainable development is also taken up in the country’s National Ecotourism Strategy of 2002 where it is stated that the State shall develop and promote ecotourism as a tool for sustainable development to support the development, management, protection, and conservation of the country’s environment, natural resources, and cultural heritage.

Protected areas are becoming important destinations for a growing tourism segment that uses intact and diverse nature as major attractions (Strasdas, 2002). All of the marine protected areas under the NIPAS have a tourism agenda particularly those classified as multiple use areas with recreational zones. The strategy and implementation vary among protected areas depending on their accessibility, attraction, and management objectives. Tourism plays an important role in the management of Tubbataha Reefs as it provides the income needed for operations and helps increase public awareness and support for the reef’s conservation (Ramsar, 2012).

The TRNP Management Plan of 2011 to be implemented by the Tubbataha Management Office (TMO) states that a tourism development and management plan will be articulated to ensure the sustainability of leisure activities within the park and that these are non-detrimental to the ecosystem and its inhabitants. Tourism is an important element in the operations of the TRNP as the visitors and tour operators are only one of the two user groups allowed in the park, the other being researchers. With the dive tourism in the TRNP expected to grow, concerns on how to develop it further while meeting the park’s conservation goal will be addressed through the TRNP Sustainable Tourism Plan.

Tourism in the TRNP

Legal and Management Framework

The legal basis for managing TRNP is Republic Act 10067, otherwise known as the TRNP Act of 2009. The Act mandates the Tubbataha Protected Area Management Board (TPAMB) to formulate policies for the conservation of the park (Sec 10) and the TMO, based in Puerto Princesa City, to carry out these policies (Sec 14 & 40). TMO is thereby in-charge of the day-to-day operations of the park, including law enforcement.

The Tubbataha Management Plan of 2011 consists of four major programs: Conservation Management, Conservation Awareness, Ecosystem Research and Monitoring, and Sustainable Resource Management.

TRNP is managed under a no-take policy to perpetuate its role of enriching fisheries in the greater Sulu Sea area through the fish and decapod larvae that it transmits outside its boundaries. Only two activities are allowed: research and tourism. Research is conducted to inform management decision-making, and tourism is undertaken to generate revenues for management activities.

As one of the only two activities allowed, the management of tourism is addressed in the legislations, policy issuances, plans and guidelines for the TRNP as listed in Table 1.

Table 1. TRNP Tourism Related Policy and Plans.

REPUBLIC ACT 10067 Tubbataha Reefs Natural Park Act of 2009
This RA establishes the park as a no-take zone, defines its metes and bounds, provides for its management structure and articulates authorized and authorized acts, and penal sanctions for non-compliance.
REPUBLIC ACT 10067 Implementing Rules and Regulations: Administrative Order No. 1 series of 2012.
Covers management set up, procedures and guidelines for adjudication of administrative cases, allowable and prohibited activities, research and monitoring, bio-prospecting, commercial filming, fees and penalties, protocols and standards among others.
Salient points: <ul style="list-style-type: none"> • TMO will collect entry fees for the park • The LGU of Cagayancillo is authorized to collect tourism fees • 10% of all conservation fees is allocated for Cagayancillo • Rule 13 covers aspects of tourism: Tourism activities such as scuba diving, snorkeling, kayaking, bird watching and the like may be allowed in TRNP. Entry and conduct of tourism activities inside the Park shall be allowed only upon issuance of the necessary permit by the TMO, subject to the requirements and procedures set forth in the following sub-rules.
The following prohibited acts apply to the tourism activities:

- Tying to moored vessels
- Not stowing fishing gear
- Use of motorized sports equipment
- Construction or installing any structure
- Cruising less than 100m, landing, setting foot, swimming, snorkeling or diving around the North and South Islets
- Swimming, snorkeling or diving in the lagoons of the North and south Islets
- Landing and setting foot on the emergent cay in Jessie Beazley
- Use of gloves while diving
- Vandalism
- Decompression dives without certification, training, and equipment
- Handling, touching, feeding, chasing resources
- Use of superlights
- Damage to reefs
- Non-payment of conservation fees
- Anchoring
- Dumping of wastes
- Littering
- Bio-prospecting without a permit
- Introduction of exotic species
- Hunt, catch, fish, kill, take, gather, remove, destroy, disturb, or possess any resource, whether living or nonliving, or products derived therefrom.

TRNP Compliance and Enforcement Plan 2012

Addresses all monitoring and compliance to RA 100067 including increasing awareness of its users. The enforcement plan includes surveillance, inspection, and documentation of all tourism activities and violations within the TRNP.

TRNP Emergency and Risk Reduction Plan 2013

The marine park rangers are recognized as best positioned for quick response and to provide assistance in emergency situations if such arise during a visit to the TRNP. The liveaboards are expected to have their own emergency response and safety protocols but will be assisted fully by the TMO as needed. The protocols for emergency response are provided in the plan, specifically for:

- Accidents and emergencies including fire for humans and assets
- Environmental disasters including global warming, major storms, natural disasters, and other natural disturbances
- Other external threats such as pollution and human activities outside of the park
- Security issues

TRNP Management Plan 2011

The management plan will be reviewed and revised accordingly in 2014. It contains, among other the goals and objectives of the TRNP management; management issues, strategies, and activities; mechanisms of protection, regulation and prohibitions; as well as mechanism to ensure stakeholder participation.

Tourism falls under the Conservation Management program of the TRNP with the following objectives:

- to ensure enjoyment of the attributes of the Park into the long-term

- to bring in additional park revenues and
- to increase appreciation and support to the TRNP and the marine environment

Activities to achieve these objectives are outlined in the plan.

TRNP Business Plan 2008

The Business Plan provides a market analysis and a marketing plan where tourism was singled out as the major revenue generating activity of the Park.

The tourism objective of its marketing plan is to increase tourist visitations to over 2000 tourists by 2012, thereby increasing annual tourism collections to cover at least 80% of the core cost of managing TRNP.

UNESCO

The World Heritage Marine Programme of UNESCO was established in 2005 with the aim of ensuring that marine sites with Outstanding Universal Value (OUV) are inscribed on the World Heritage List and protected so future generations can continue to enjoy them.

Forty-five marine sites have now been inscribed on the World Heritage List, covering about 1.5 million km² of the ocean surface (Obura, et al., 2012). Two of these sites are in the Philippines, namely, the Puerto Princesa Subterranean River National Park and the Tubbataha Reefs Natural Park. Due to its World Heritage status, the Philippine NTDP considers TRNP an asset to its Central Philippines-Palawan cluster.

The mission of the UNESCO World Heritage and Sustainable Tourism Program is to facilitate the management and development of sustainable tourism at World Heritage properties by fostering increased awareness, improving capacity and balancing participation of all stakeholders. It aims to protect the properties' OUV while ensuring that tourism delivers benefits for conservation, contributes to sustainable development for local communities, and provides quality experience for visitors.

Ramsar

The Convention on Wetlands of International Importance, called the Ramsar Convention has listed six sites in the Philippines which includes Tubbataha. The Ramsar mission is "conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world". To achieve this, Ramsar looks at tourism as integral to its mission, as it provides the income needed to manage the properties and increases public awareness and support for the reefs' conservation (Ramsar, 2012).

TRNP Tourism Benefits

Revenue from tourism fees are used in the operations of the park. There have been instances where concerned visitors provide the park support through grants and in-kind. In the last five years, the park generated 37% of its operating cost from tourism revenues (Table 18). Tourism also provides funds for

livelihood projects and community development activities in the Municipality of Cagayancillo, which has political jurisdiction over Tubbataha.

Tourism allows the public to access the park and, thus, educate and raise awareness among its users. The TRNP goals for raising conservation awareness are supported by its visitors, who highly appreciate the value of protecting the reefs and have the potential to be ambassadors of conservation for the TRNP, if not conservation in general.

Tourism supports research. Visitors to the park could participate in data gathering for the scientific studies carried out by the TMO, through a crowd sourcing methods. Although opportunistic in nature, monitoring the reefs has been conducted by its visitors, particularly the presence of crown of thorns (COTs), coral bleaching, fish species, and reef damage among others. Documentation through photography has been an important source of information for the species present in the reef and the status of some of its areas.

Tourism increases partnerships, cooperation and collaboration through frequent engagement with the stakeholders belonging to the various strata of the tourism industry.

TRNP Tourism Products

SCUBA Diving

TRNP offers SCUBA diving as its main attraction. Diving is generally good for both highly experienced and the not-so-well-seasoned divers. Average depths for optimal diving are generally from 10 to 30m. The visibility is excellent during the diving season and may reach up to 40m and the average water temperature is 28°C.

There are 15 identified dive sites with moorings (excluding Jessie Beazley) in Tubbataha, each offering exquisite underwater views with high probability of megafauna sightings. Excerpts of the descriptions of the different dive areas are presented in Table 2.

Table 2. Popular Dive sites in the TRNP. Source: Website: <http://www.tubbatahanow.com>.

Dive Area/Dive Site	Description
<i>North Islet, East Face</i> <ul style="list-style-type: none"> • <i>Shark Airport</i> • <i>Washing Machine</i> 	The east face of Tubbataha reef is an excellent dusk dive site for here are plenty of marine species in action and very ideal for macro photography. Between 14 meters and 20 meters is a rich coral slope on sand that drops to a wall with caves, crevices and overhangs.
<i>North Islet, North Face</i> <ul style="list-style-type: none"> • <i>Seafan Alley</i> • <i>Terraces</i> 	With an average depth of 30 meters and a maximum depth of 37 meters, this north end of Tubbataha reef is another must-visit site in Palawan. It has a sandy slope with coral heads and leads to a wall with overhangs, caves and crevices. Among these are giant gorgonian sea fans, black corals, soft corals, and barrel sponges. Currents here are usually mild but can be strong enough for your diving experience to be fierce. The visibility is up to 37 meters.

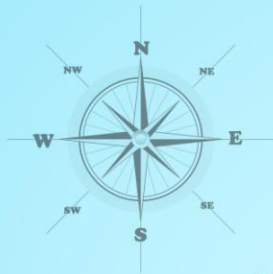
<p><i>North Islet, Southwest Corner</i></p> <ul style="list-style-type: none"> • <i>Wall Street</i> • <i>Malayan Wreck</i> 	<p>The southeast corner of Tubbataha Reef North Islet is composed of shallow reef slopes that are between 33 feet and 65 feet. In the rich sandy slopes are lots of small reef fish and numerous guitar sharks as well as the leopard sharks.</p> <p>The visibility here is up to 37 meters. The average depth is 65 feet and the maximum depth is up to 60 meters.</p>
<p><i>North Islet, Southeast Corner</i></p> <ul style="list-style-type: none"> • <i>South Park</i> • <i>Amos Rock</i> 	<p>The southeast corner of Tubbataha Reef North Islet is a gentle slope with plenty of mixed corals reaching up to 40 feet and drops into a deep wall. It has a huge reef top with leopard fish, sea cucumbers, giant clams, octopus, and Bohadschia sea cucumbers.</p>
<p><i>South Islet, North/Northeast end</i></p> <ul style="list-style-type: none"> • <i>T-Wreck</i> • <i>Black Rock</i> • <i>Ko-ok</i> 	<p>The northeast end of Tubbataha Reef South Islet is another rich slope with an average depth of 60 feet to a maximum depth of 200 feet plus. Here is a wall that has an abundant growth of gorgonian sea fans, soft corals and barrel sponges.</p> <p>The visibility can reach up to 37 meters. Currents are usually calm with some swell and sometimes can be strong.</p>
<p><i>South Islet, Southeast/southwest end</i></p> <ul style="list-style-type: none"> • <i>Delsan Wreck</i> • <i>Triggerfish City</i> • <i>Staghorn Point</i> • <i>South West Wall</i> 	<p>The south end of Tubbataha reef south islet is much alike with the dive at the islet's northeast end but with far larger area of shallow reef top.</p> <p>The site has an average depth of 20 meters and maximum of 60 meters plus. Current conditions are normally calm with some swell. During strong currents, you might be taken in either direction. The current changes without alarm and gives you a fierce dive.</p>
<p><i>Jessie Beazley</i></p>	<p>Jessie Beazley is an amazing dive site located at approximately 20 km northwest of North Tubbataha. It is a small reef that offers an overwhelming and exhilarating dive. Fishing is allowed here for it is not as secured as a marine park. Dive operators commonly get here when the weather is calm.</p> <p>The diving depth starts from seven meters up to 50 meters plus. The currents are moderate and can be strong.</p>
<p><i>Jessie Beazley Reef – Southern End</i></p>	<p>The southern end of the Jessie Beazley Reef is one of the greatest dive spots found in the system. It is rewarded for the excellence of its water's visibility and spectacular marine life. Aside from being an excellent dive spot, it is also an ideal place for macro-underwater photography.</p> <p>The site is located near the Lighthouse. It has an extensive reef top with lots of beautiful whips and large table corals.</p>

Diving within the TRNP is allowed except inside the lagoons of the two atolls. Despite the limited restricted area, only 30% of the total area of the park is being utilized for tourism. Although most of the reefs could be accessed easily, the dive boats tend to limit diving to the vicinity of the buoys to allow for quick deployment of divers to the dive sites and to conserve fuel.

**TUBBATAHA REEFS NATURAL PARK
AND WORLD HERITAGE SITE**
Cagayancillo, Palawan, Philippines



**JESSIE BEAZLEY
REEF**



**NORTH
ATOLL**



Amos Rock South Park



**SOUTH
ATOLL**

SW Wall Triggerfish City Staghorn Point

LEGEND:

- Mooring Buoy
- Dive Site
- Ranger Station
- Bird Islet
- South Islet
- New Ranger Station



Figure 1. Dive Sites, Boundaries, Structures, and Features of the TRNP. Source: Tubbataha Management Office

Liveaboard dive operations

Six-day trips including travel time are offered by dive operators. Divers therefore have a total of four days of unlimited diving in TRNP. Live-aboard boats are the only means for most tourists to visit the area.

To get to Tubbataha, the takeoff point is the capital of Palawan Province, Puerto Princesa. Dive operators transport guests from the airport to the wharf, some five minutes' drive away, to the dive boat. From here, the 90-nm journey takes around 10 to 12 hours. Most of the vessels leave after dinner and arrive in Tubbataha at the break of dawn. Some slower vessels, however, leave the wharf earlier in order to arrive in the Park at first light.

Since Tubbataha is a marine park, there are designated mooring areas and strict regulations on the conduct of diving activities. Visitors are briefed on these matters at the start of their journey.

Dive operators are considered partners in conservation. These are private companies that have secured permission to operate in Tubbataha. Aside from providing the accommodation facilities, they help the TMO in reporting illegal activities in the protected area. Table 3 shows the nine liveaboard dive operators in the TRNP.

Table 3. List of Dive Operators in Tubbataha (2013).

Dive Operator/ tonnage	Ave. # of Trips	Max Occupancy per trip	Maximum Occupancy per year	Duration of trips	Transition	Other packages
<i>Sakura</i>	12	10	120	4 days, 5 nights	Puerto Princesa- based	
<i>MB Dschubba</i>	10	10	100	5 days, 6 nights 7 days, 8 nights	Puerto Princesa- based	Northern Palawan Cruise Southern Palawan Cruise
<i>Discovery Palawan</i>	12	32	384	7 days, 6 nights	Batangas	Northern Palawan (October-June)
<i>Vasco</i>	11	16	176	7 days, 8 nights 6 days, 7 nights	Anilao	Apo Reef, Coron Visayas

<i>Philippine Siren</i>	11	18	198	5 days, 6 nights 12 days, 13 nights		Visayas (year round) Batangas, Coron (Nov. - Feb.) Southern Leyte (Mar. - May)
<i>Atlantis Azores Philippines</i>	14	16	224	6 days, 5 nights		Bohol (June - Dec.) Malapascua
<i>Oceana Maria Scuba</i>	13	12	156	6 days, 7 nights	Manila	
<i>Seadoors</i>	14	16	224	5 days, 6 nights 9 days, 10 nights		Apo Reef (Dec. - Feb) Palawan (March) Tubbataha (March - June) Visayas (June - Dec)
<i>Palasport</i>	9	28	252	6 days, 5 nights 7 days, 6 nights 8 days 7 nights	Cebu	

Non-diving and other tourism activities

TRNP become a target for nautical tourism, a tourism product offering entertainment activities concentrated on the ocean and can include such activities as recreational boating, marinas, cruises, water sports, water based tourism such as marine wildlife tourism maritime history, etc. (Shell Harbour 2008). However, only on sailboat is known to have visited the park in the last 10 years.

TRNP Visitor's Profile

Visitor arrival in TRNP has been generally increasing since 2002 with an average annual growth of 9% despite the downtrend in 2012 and 2013 (Fig. 2). The increase of visitor arrivals to the park can be attributed to the recognition of various media outlets citing the destination as one of the best dive spots in the world. Four significant downtrends were observed in 2007, 2009, 2012, and 2013. They were either due to cancellation of trips by the operators because of engine problems or due to indement weather.

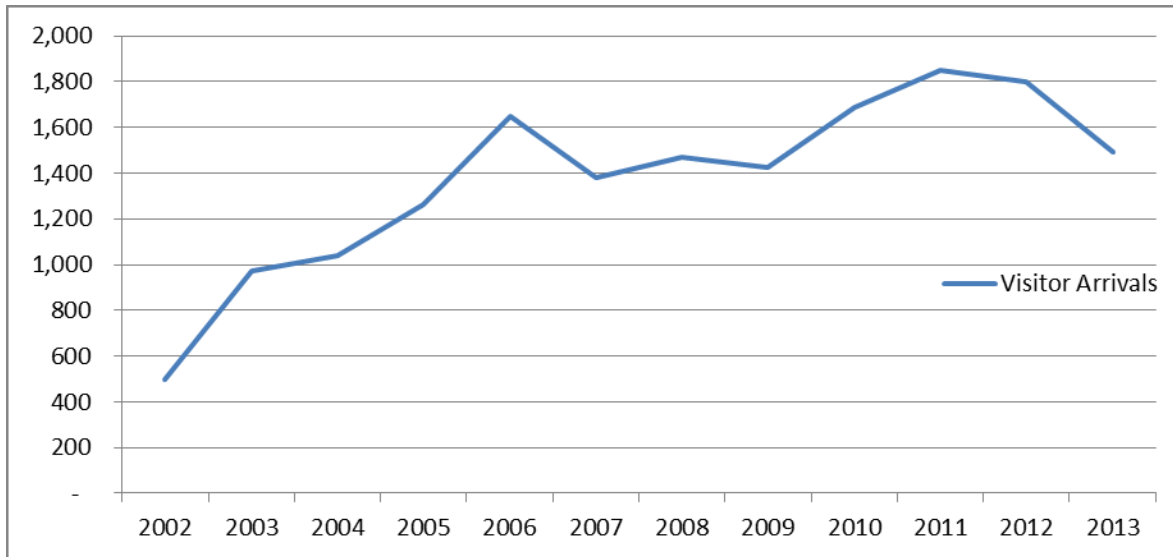


Figure 2. Visitor Arrival in the TRNP. Source: Tubbataha Management Office

It is also interesting to note that foreign visitor arrivals in TRNP somehow corresponded to the increase of tourist arrivals in the country (Fig. 3).

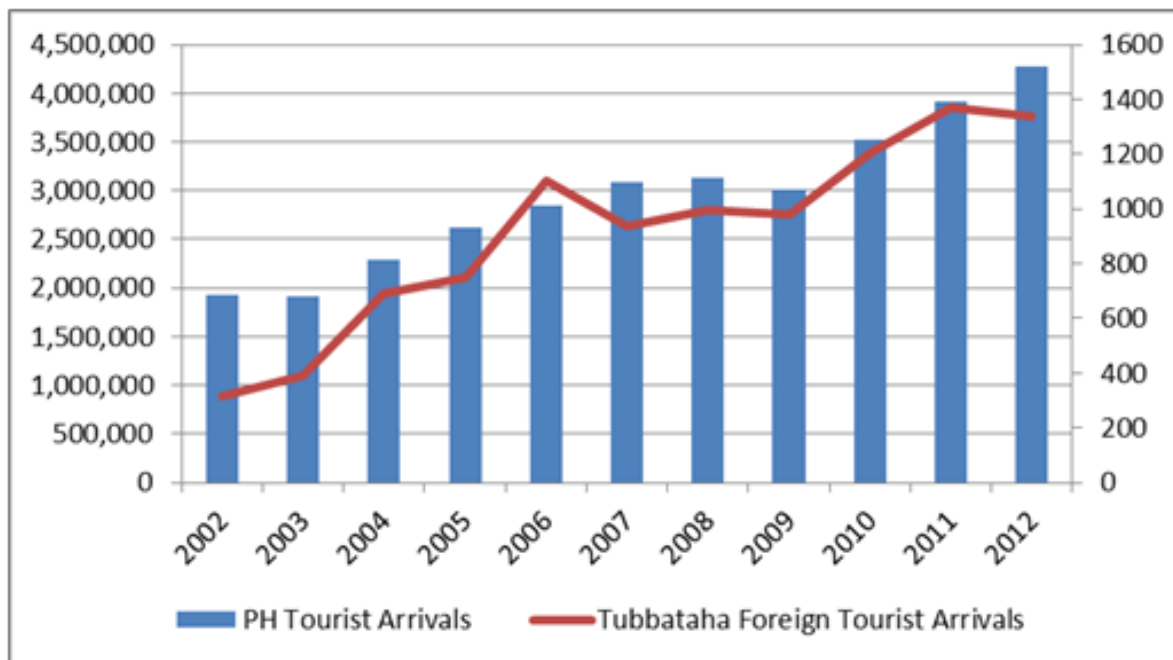


Figure 3. Foreign Tourist Arrivals PH vs. Tubbataha (2002-2012). Source: Tubbataha Management Office

Majority of the tourists are Europeans comprising 31.97% of the total arrivals from 2002-2013. Germans, French, and Swiss are the top European nationalities (Fig. 4). The Asian market is the second biggest market of TRNP consisting of 27.94% of the total tourist arrivals from 2002-2013. It has been dominated by Japanese, Chinese, and Koreans. The Japanese market however has been declining since 2009. The Chinese and the Korean markets on the other hand have shown variable growths in the last

five years. The North American and Australian markets hold 11.18% and 2.10% respectively of the market share and have been consistently increasing the past decade.

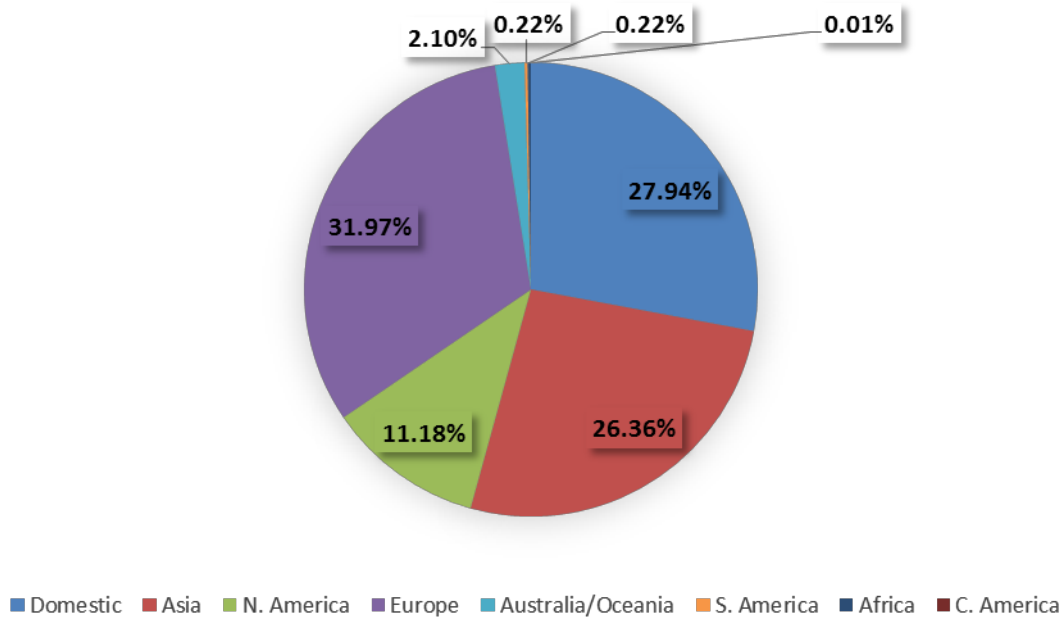


Figure 4. Market Shares in TRNP (2002-2012). Source: Tubbataha Management Office

While the foreign market share has shown significant increase, the local market share, on the other hand, has been declining since 2006, but started to show considerable growth since 2009 (Fig. 5).

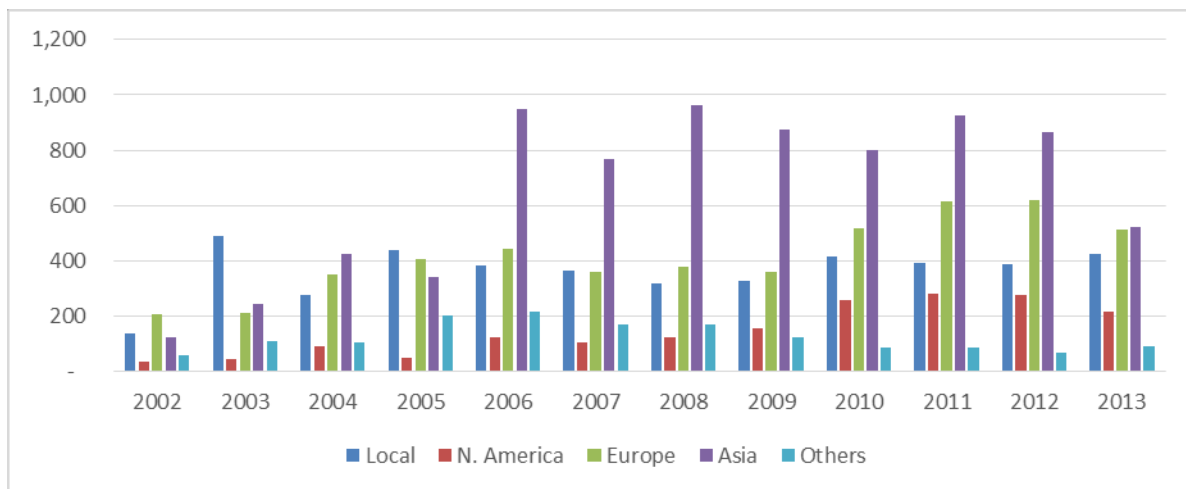


Figure 5. Tourist geographic distributions in TRNP (2002-2013).
Source: Tubbataha Management Office

Twenty five percent (25%) of tourist arrivals belong to the 35-44 age group. Three percent (3%) are 65 years and above, with the oldest tourist being 86 (Fig. 6). Twenty-two percent (22%) did not indicate their age in the visitor forms provided by TMO.

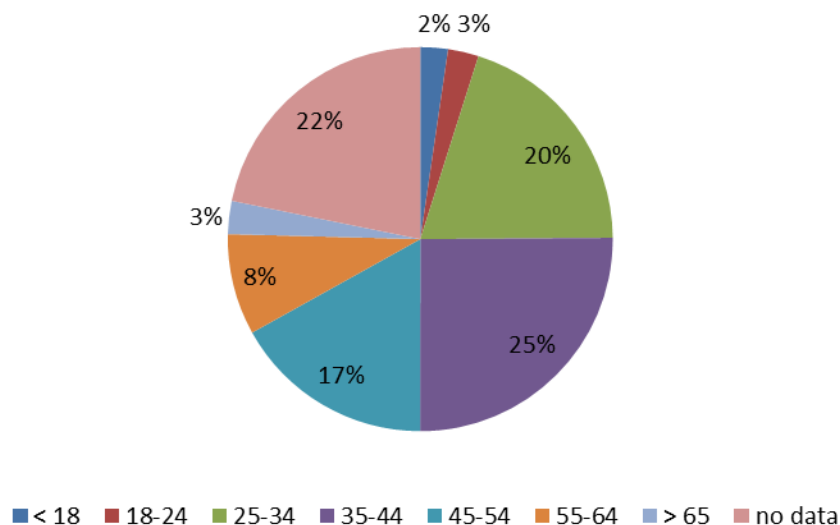


Figure 6. Age distribution of tourist from 2002-2013. Source: Tubbataha Management Office

Revenues from Tourism

The TRNP generates income from conservation fees charged as vessel and visitor entry fees. Current fees are highest for entry to protected areas in the Philippines and are slightly higher than in most marine protected areas in other countries. Table 3 presents the fees being collected by TRNP.

Table 3. Vessel and Visitor Conservation Fees in the TRNP (2013).

Vessel Fees (Php)		Visitor Fees (Php)	
<i>100 gross tons below</i>	3,000.00	<i>Divemaster</i>	250.00
<i>101-200 gross tons</i>	4,500.00	<i>Regular Visitor</i>	3,000.00
<i>201 gross tons above</i>	6,000.00	<i>Repeat Visitor (within the season)</i>	1,500.00

Source: Tubbataha Management Office

The trend of the TRNP fees collection is presented below. The collections made correspond to the number of visitor arrivals (Fig. 7). It may be possible in certain instances where an increase in arrivals does not result to an increase in revenues such as having more repeat divers in one season, as they get a 50% discount.

Ten percent of the total collection goes to the Municipality of Cagayancillo to support community development projects while the rest are utilized by the TMO for their operations.

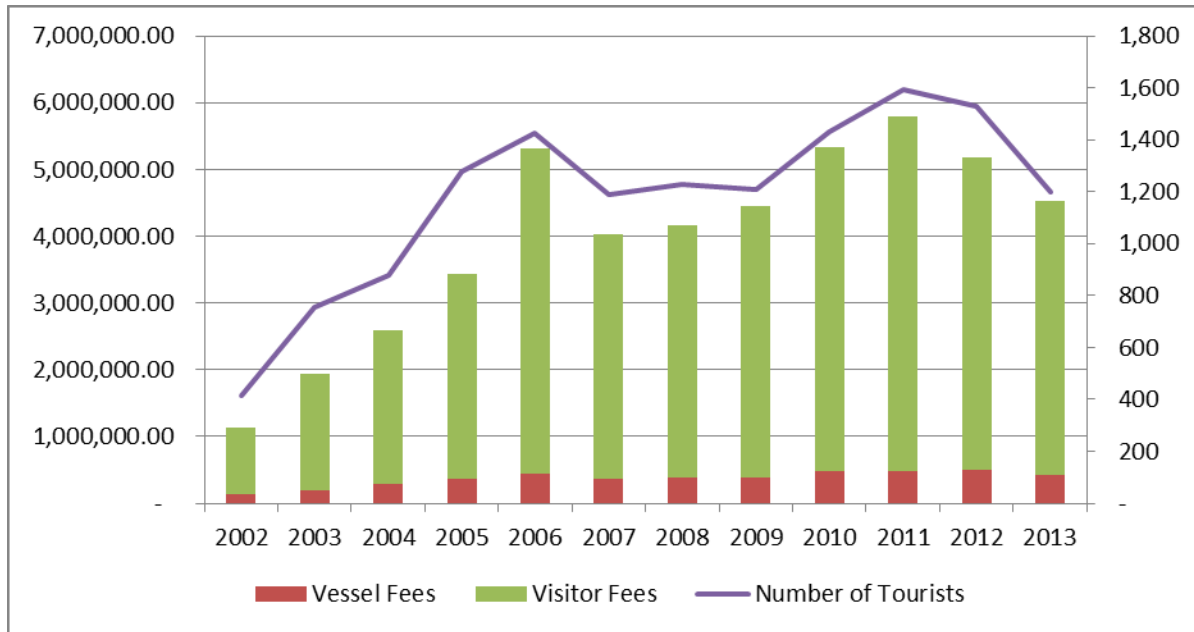


Figure 7. Conservation Fee Collection Trends in TRNP in Php (2002-2013).

Source: Tubbataha Management Office

Violations in the TRNP Related to Tourism

The documented cases related to tourism from 2005-2013 in the TRNP can be seen in Table 4.

Table 4. TRNP violation related to tourism (2005-2013).

Case	No. of cases (2005-2013)	Action
<i>Late application of dive boat for Permits to Operate</i>	3	Warning
<i>Failure to submit visitor entry forms</i>	1	Warning
<i>Coral damage from grounding of dive boats</i>	3	Fine
<i>Entry without a permit</i>	2	Fine
<i>Anchoring</i>	1	Fine
<i>Extraction of endangered species (e.g., giant clam)</i>	1	Fine and ban of individuals involved

Source: Tubbataha Management Office

The usual penalty for permit and documentation violations is a warning. More severe violations usually related to Rule 28 of the revised IRR of RA10067 are penalized through fines and a ban from using the park. There is a probability that some if not most incidents remain unmonitored and unreported.

There also seems to be a decrease in cancelled trip from 2002 at 9%; 5% in 2008; 3% in 2011; and 3% in 2012. However, there was an increase to 7% in 2013. The cancellations are mostly attributed to engine/equipment failure of the dive boats.

Market Analysis

PEST Analysis

The macroeconomic environment of Tubbataha was evaluated through the identification and analysis of the political, economic, social, and technological (PEST) factors that affect or may affect its current and future business performance.

Table 5. TRNP Political, Economic, Social, and Technological (PEST) Analysis.

Factors	Description
<i>Political and legal</i>	<ul style="list-style-type: none"> • The Philippines is generally stable but corruption rife; isolated peace and order concerns. • Palawan is seen as a peaceful place and its people as highly environmentally conscious. • Republic Act. No. 10067 or the Tubbataha Reefs Natural Park Act was enacted to ensure the conservation and preservation of the TRNP in 2009. • Environmental laws are numerous but mostly not enforced.
<i>Economic</i>	<ul style="list-style-type: none"> • The Philippines has the fastest growing economy among Asian countries. The Philippine National Statistical Coordination Board (NSCB) announced that the country's gross domestic product (GDP) grew by 7.8 percent in the first quarter of 2013. • High employment rate at 92.9% however 20.9% falls to underemployment. • Major industries include manufacturing, work service, tourism, mining, agriculture, fisheries, and forestry. • Economy tied to \$US. • Palawan major industries are agriculture, tourism, mining, fishing with the last being predominant.
<i>Social</i>	<ul style="list-style-type: none"> • The Philippine population is 98.74M. Increasing at an annual rate of 1.89% (NSO, 2013). • Majority are Christians (95%) with Roman Catholic being the dominant Religion (93.4%) (NSO, 2005). • High simple literacy rates refers to those with basic reading and writing skills (95.6%) (NSO, 2008). • Functional literacy is 86.4%; these include people possessing computational skills in addition to the basic reading and writing skills (NSO, 2008). • Official languages are Tagalog and English though dialects spoken throughout the archipelago total 170. • Palawan population is 771,667 (NSO, 2010). The province exhibits high annual population growth rate of 2.66%. • Filipinos resilient to misfortune.
Technological	<ul style="list-style-type: none"> • Filipinos adapt quickly to new technology.

- Technology is easily accepted and applied when affordable.
- The application of new technologies in the management of Tubbataha will result in more effective conservation of the park

Market Definition

SCUBA diving tourism

A recognized subset of marine tourism, diving tourism, is one of the emerging sectors in the global tourism industry. Now a multi-billion dollar business, diving has come a long way from being an underwater sport restricted to a few enthusiasts to a holiday leisure activity undertaken by an increasing number of people (Musa and Dimmock, 2012). Professional Association of Diving Instructors (PADI) has granted more than 21 million diver certifications worldwide in 2012 (PADI, 2013). In 2008, PADI reported that around 60% of the divers worldwide are from the US, 30% from Europe, and 10% from the rest of the world (PADI, 2012). United Nations World Tourism Organization (2001) also suggests that one in three divers takes an overseas holiday with a main purpose of travelling to world-class dive sites. Countries around the world have been promoting diving as part of their tourist activities, and generated more than 8 million US dollars in receipts worldwide (UNWTO, 2001).

The Philippines, located well within the coral triangle, is endowed with over 500 existing and potential dive sites, making it one of the emerging destinations of the global dive tourism industry. Other notable dive sites in the country are Apo Reef, Puerto Galera, Verde Island, Anilao, Balicasag Island, Apo Island, Moalboal, Monad Shoal, and Sogod Bay. The Tubbataha Reefs Natural Park is considered to be the leading site in terms of biodiversity and global significance. Despite the wide array of sites, the diving market in the Philippines is relatively small. In 2012, scuba divers accounted for only 3.5% of foreign tourist arrivals (DOT, 2013). However, diving tourism in Philippines is seen to become an important contributor to the tourism industry especially in attracting long-haul markets in Europe and America who are more likely to stay longer and are willing to spend more during travel.

Visitor trends

Foreign arrival market trends

The year 2012 was a milestone for the tourism industry hitting the 4 million mark in visitor arrivals. Arrivals reached 4.3 million but missed the target by around 300,000. Despite this, the industry maintains a positive outlook with a general increasing trend since 2000. The tourism industry is recognized as an important driver of the economy contributing 5% of GDP and 12% of the total employment in the country in 2012. Figure 8 shows the trend in foreign tourist arrivals in the country.

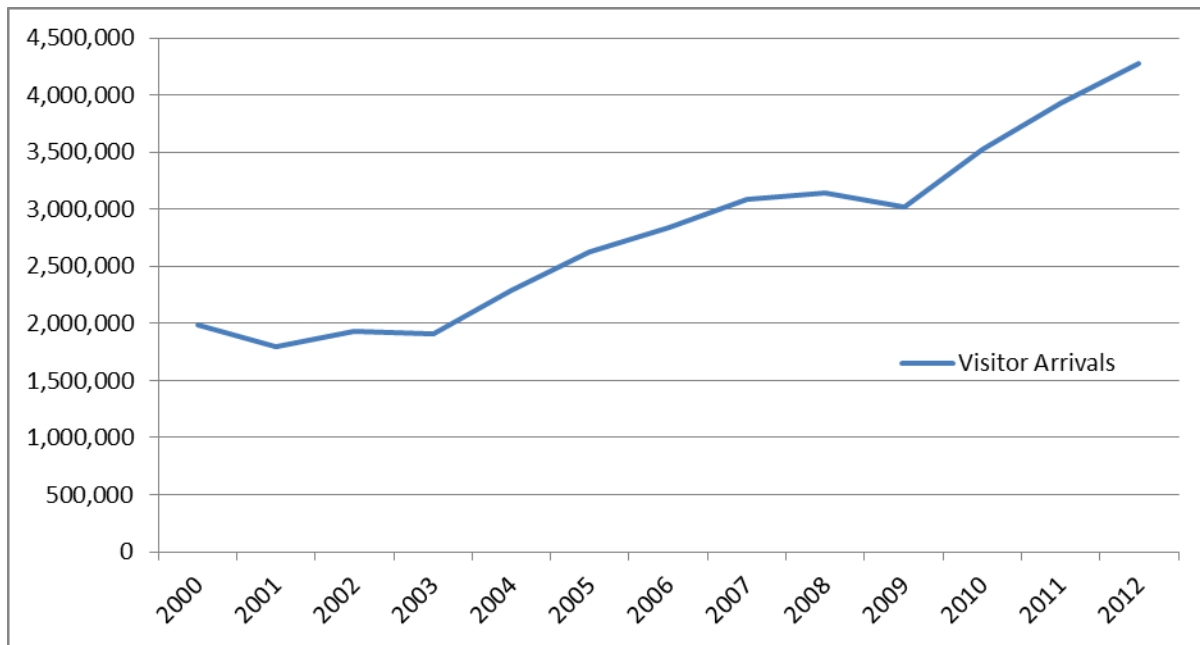


Figure 8. Foreign Visitor Arrival Trends in the Philippines (2000-2012).

Source: Department of Tourism

The leading foreign source markets in 2012 were Korea, USA, and Japan. Korea continued to be the top market with an 11% growth from 2011, and reaching the 1 million mark in 2012. Table 6 presents the top 10 foreign source markets of the Philippines.

Table 6. Top 10 Source Markets in the Philippines (2012).

Rank	Country	2011	2012	Growth Rate
1	Korea	925,204	1,031,155	11%
2	USA	624,527	652,626	4%
3	Japan	375,496	412,474	10%
4	China	243,137	250,883	3%
5	Taiwan	181,738	216,511	19%
6	Australia	170,736	191,150	12%
7	Singapore	137,802	148,215	8%
8	Canada	117,423	123,699	5%
9	Hong Kong	112,106	118,666	6%
10	Malaysia	91,752	114,513	25%

Source: Department of Tourism

In 2011 and 2012, majority of the foreign tourists went to the Philippines for a holiday. Table 7 shows the purpose of visit of foreign visitors in the country.

Table 7. Purpose of Travel for Foreign Visitors to the Philippines (2011-2012).

Purpose of Visit	2011	2012
<i>Holiday</i>	40.63%	55.79%
<i>Visit Friends / Relatives</i>	9.31%	3.47%
<i>Business</i>	9.43%	10.22%
<i>Official Mission</i>	0.09%	0.06%
<i>Convention</i>	0.85%	1.08%
<i>Incentives</i>	0.01%	0.00%
<i>Health / Medical Reason</i>	0.16%	0.20%
<i>Others</i>	3.93%	4.01%
<i>Not Stated</i>	35.12%	24.82%

Source: Department of Tourism

Having friends and relatives in the Philippines is the top motivation for foreign tourists coming to the country (Table 8). In 2012, there was a growth in the share of those who came here upon the recommendation of their friends.

Table 8. Motivation to Visit the Philippines (2011-2012).

Motivation to Visit	2011	2012
<i>Have friends/relatives in the Phils.</i>	44.30%	28.60%
<i>Recommended by friends</i>	8.70%	19.20%
<i>Curiosity/never been to the Phils.</i>	12.10%	10.40%
<i>Past experience/have been to the Phils. before</i>	6.60%	8.80%
<i>Inexpensive to spend holiday</i>	2.10%	1.30%
<i>Family/ relatives</i>	4.80%	4.10%
<i>Proximity to own country/near country</i>	0.80%	1.70%
<i>Television/radio/film/video/internet</i>	4.20%	4.50%

Source: Department of Tourism

Friends, relatives, and business associates were the top sources of information for foreign tourists. The internet came in second (Table 9).

Table 9. Main Sources of Information of Foreign Tourists to the Philippines (2011-2012).

Main Sources of Information	2011	2012
<i>Friends/Relatives/Business Associates</i>	50.70%	41.30%
<i>Internet</i>	21.00%	24.40%
<i>Travel Agents</i>	19.10%	21.90%
<i>Myself</i>	2.50%	2.30%
<i>Previous Visit</i>	3.60%	6.30%
<i>Travel Books/Guide Books/Directories</i>	1.30%	1.40%

Source: Department of Tourism

Shopping is the top activity of foreign tourists in the country (Table 10). Divers constitute a small market only.

Table 10. Activities of Foreign Tourists in the Philippines (2011-2012).

Activities in the Philippines	2011	2012
<i>Shopping</i>	77.90%	64.90%
<i>Sightseeing</i>	27.10%	27.40%
<i>Visit friends/relatives</i>	12.30%	7.30%
<i>Beach holiday</i>	6.80%	6.80%
<i>Sports</i>	1.20%	2.20%
<i>SCUBA Diving</i>	1.90%	3.50%
<i>Investment Opportunities</i>	1.60%	0.90%

Source: Department of Tourism

Domestic trends

The domestic market serves as an important contributor to the country’s tourism industry as well. In 2011 alone, more than 21 million domestic tourists were already accounted for with a total expenditure reaching 10 billion Pesos. Figure 9 shows the growth of domestic tourism in the Philippines.

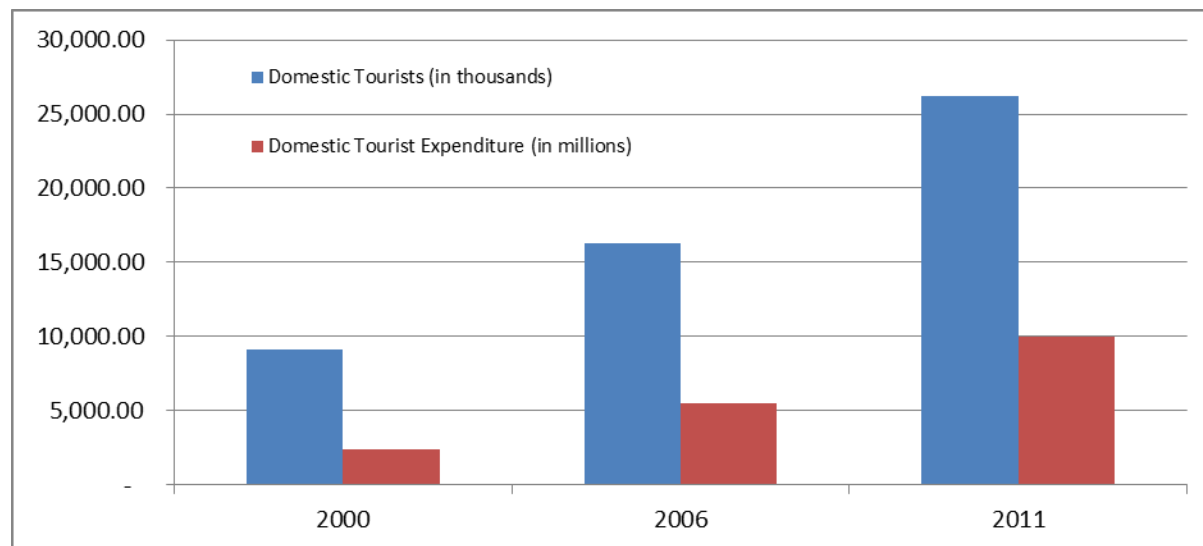


Figure 9. Domestic Tourist Growth in Volume and Expenditure (2000-2011).

Source: Department of Tourism

There are limited data on the number of divers in the Philippines, but it is worth noting that more than half of domestic tourists travel for vacation, according to the National Household Domestic Visitors Survey conducted by the Department of Tourism and National Statistics Office in 2010 (Table 11).

Table 11. Main Purpose of Travel of Domestic Tourists (2010). Survey Participants were allowed to choose more than one purpose.

Main Purpose of Travel	%
------------------------	---

<i>Visit friends or relatives/Attend family gatherings</i>	36.90%
<i>Pleasure/Vacation</i>	53.30%
<i>Business/Profession</i>	6.20%
<i>MICE</i>	2.20%
<i>Study/Training/Exchange Program</i>	1.70%
<i>Official Government Mission</i>	0.50%
<i>Medical/Health Reason</i>	4.40%
<i>Religion/Pilgrimage</i>	6.00%
<i>Others</i>	14.70%

Source: 2010 Household Survey on Domestic Visitors, Department of Tourism and National Statistics Office

Dive tourism trends

The dive tourism market is globally expanding. Countries that offer diving have been trying to capture and utilize this market because dive tourists are characterized to have longer lengths of stay with higher than average expenditure than most tourists. Table 12 shows the number of divers visiting the Philippines. While only a small percentage of tourists come to the Philippines to dive, the Department of Tourism recognizes the potential of this market. Dive tourism is identified as one of the core tourism products in the Philippines in its NTDP.

Table 12. Number of Divers in the Philippines by Source Markets (2010-2012).

Market	2010	2011	2012
<i>Korea</i>	8,887	7,402	68,056
<i>United States</i>	19,805	9,992	12,400
<i>Germany</i>	18,851	14,625	10,724
<i>Australia</i>	12,682	8,708	8,602
<i>Hong Kong</i>	6,286	2,018	8,188
<i>United Kingdom</i>	12,891	8,671	6,570
<i>Singapore</i>	2,179	1,654	2,371
<i>Canada</i>	5,424	3,640	2,227
<i>Japan</i>	1,435	375	2,062
<i>China</i>	187	1,216	1,756
<i>Taiwan</i>	1,282	1,272	1,516
<i>Overseas Filipinos</i>	-	-	1,728
Total	89,911	59,572	126,200

Source: Department of Tourism

Table 13 shows the top foreign source markets of divers in the Philippines and the corresponding share of the total visitor arrivals.

Table 13. Market Share of Divers in the Philippines (2010-2012).

Market	2010	2011	2012
<i>Korea</i>	1.20%	0.80%	6.60%
<i>United States</i>	3.30%	1.60%	1.90%
<i>Germany</i>	32.10%	23.90%	16.00%
<i>Australia</i>	8.60%	5.10%	4.50%

<i>Hong Kong</i>	4.70%	1.80%	6.90%
<i>United Kingdom</i>	13.30%	8.30%	5.80%
<i>Singapore</i>	1.80%	1.20%	1.60%
<i>Canada</i>	5.10%	3.10%	1.80%
<i>Japan</i>	0.40%	0.10%	0.50%
<i>China</i>	0.10%	0.50%	0.70%
<i>Taiwan</i>	0.90%	0.70%	0.70%
<i>Overseas Filipinos</i>	-	-	0.80%

Source: Department of Tourism

The Department of Tourism was able to compile a profile of divers of some markets from 2010 to 2012 (Fig. 10).



Figure 10. Divers' Profile of Selected Markets (2010-2012). Source: Department of Tourism

TRNP Diver Demographics

Visitor arrivals in Tubbataha have been generally increasing since 2002 with a compounded annual growth of 9%. It is worth noting that visitor arrivals in Tubbataha grew along with the increase of arrivals in the country, with the exception of the years 2007 and 2012 (Fig 3). Of the total dive tourists in the country, Tubbataha's share was 1.84% and 0.90% in 2011 and 2012 respectively. The year 2013 saw a 22.6% decline in tourist arrivals, falling to 1,182 from 1,528 arrivals in the previous year.

The decrease of arrivals in 2012 and 2013 is attributed to the cancellation of trips. Three trips were cancelled in 2012 due to mechanical and engine problems. In 2013, seven trips were cancelled due to mechanical and other operational restraints of the dive operators as well as cancellation by guests.

There is a relatively stable distribution of foreign and domestic tourists in Tubbataha. On average, 74% of the tourists are foreign, while 26% are domestic (Fig 11). A huge increase in market share of domestic tourists was observed from the years 2012 to 2013, with domestic market share at 22% and 28%, respectively.

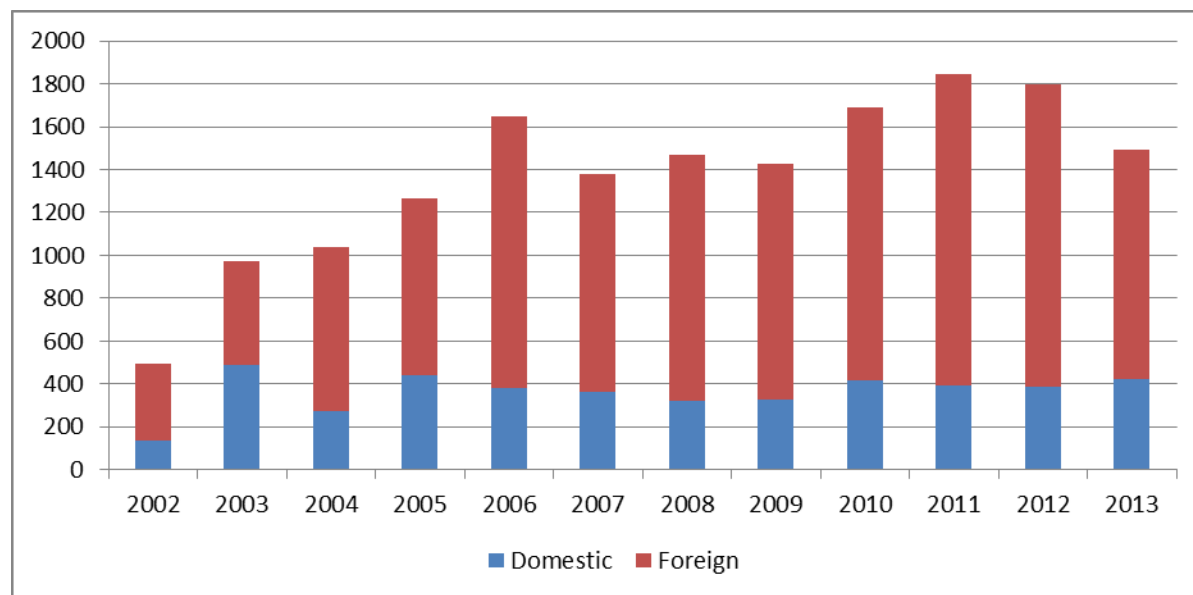


Figure 11. Distribution of Domestic and Foreign Markets of Tubbataha (2002-2013).

Source: Tubbataha Management Office

The top foreign source markets of Tubbataha are listed on Table 14. Out of the top foreign markets, only France continues to increase while the rest of the markets have been declining. Other foreign source markets have fluctuations in arrivals. There is, therefore, an inherent need to prepare a programmed marketing scheme to stabilize these markets (see section on marketing).

Table 14. Percentages of Top Markets of TRNP by Nationality.

Nationality	%
<i>Filipino</i>	26.32%
<i>Japan</i>	13.56%
<i>USA</i>	9.19%
<i>Germany</i>	6.05%
<i>France</i>	4.39%
<i>China</i>	3.90%
<i>Switzerland</i>	3.49%
<i>Russia</i>	3.17%
<i>UK</i>	3.09%
<i>South Korea</i>	2.68%

<i>Belgium</i>	2.03%
<i>Others</i>	22.13%
Total	100.00%

Source: Tubтатаha Management Office

The domestic market, on the other hand, has been showing considerable stable growth (Fig. 12).

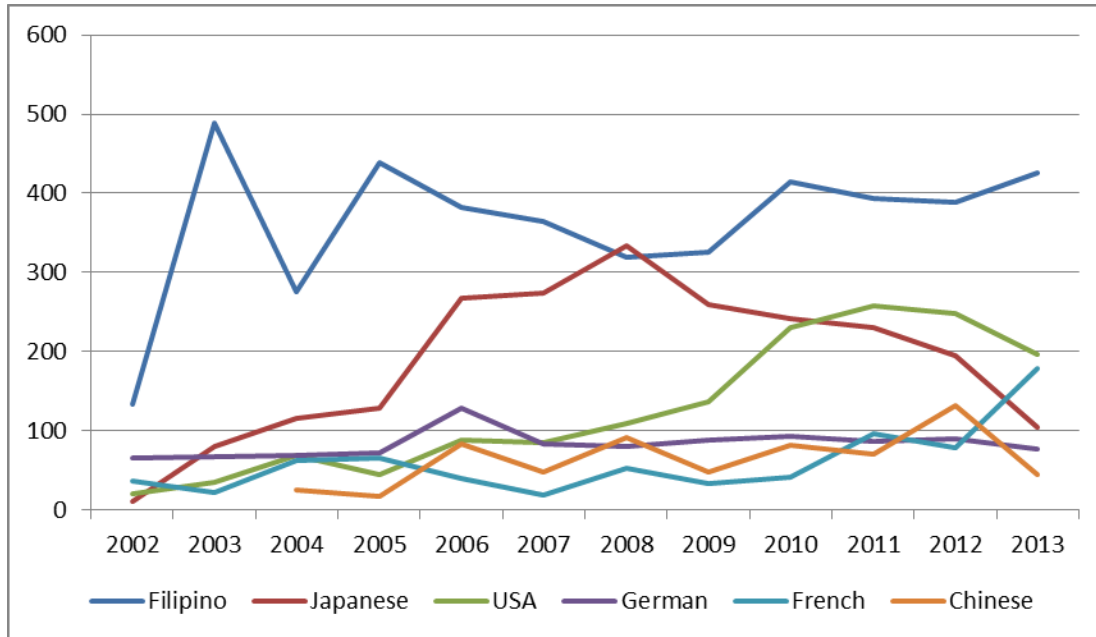


Figure 12. Tourist Arrivals of Selected Markets (2002-2013). Source: Tubтатаha Management Office

Males have consistently dominated the diving market in the Philippines, reflecting worldwide data (PADI, 2012) (Fig 13). Generally, divers are aged 35-44 years old. Most male divers in Tubтатаha are single, between ages 35-44 (Fig. 14). Females, on the other hand, are mostly single, between ages 25-34 (Fig. 15).

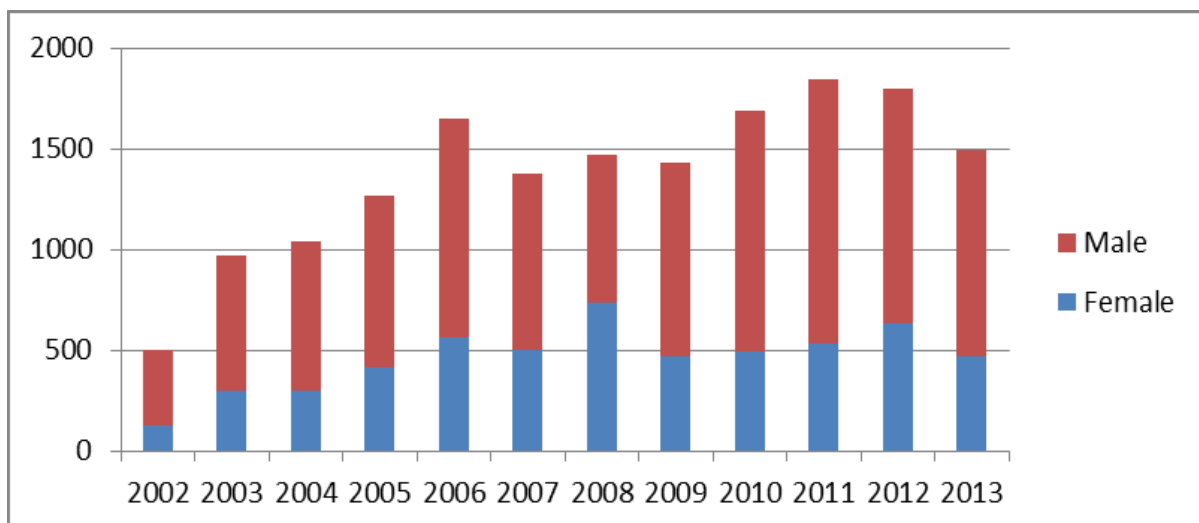


Figure 13. Gender Distribution of Visitor Arrivals in TRNP (2002-2013). Source: Tubbataha Management Office

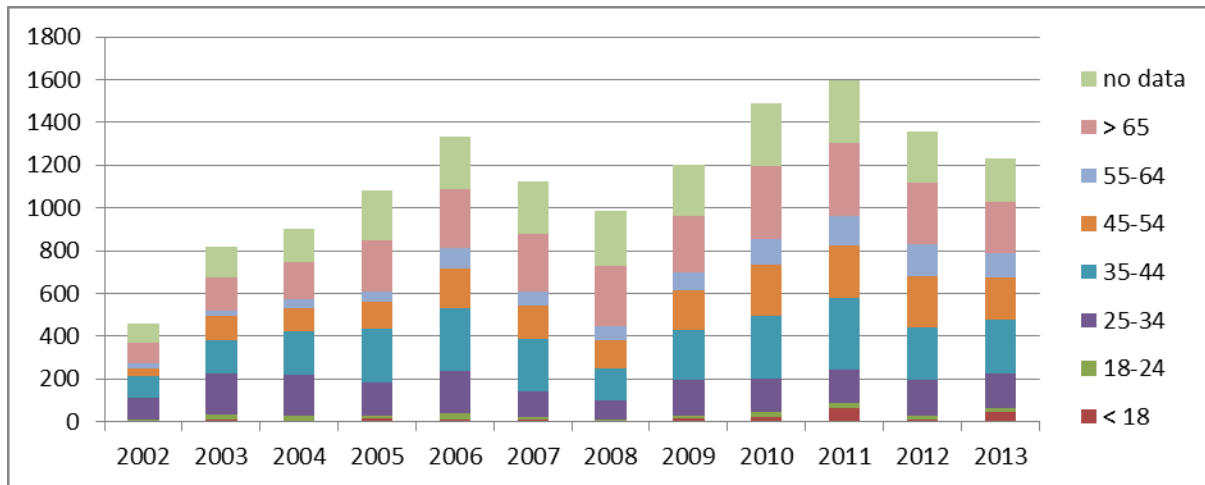


Figure 14. Age Distribution of Male Visitors to TRNP (2002-2013). Source: Tubbataha Management Office

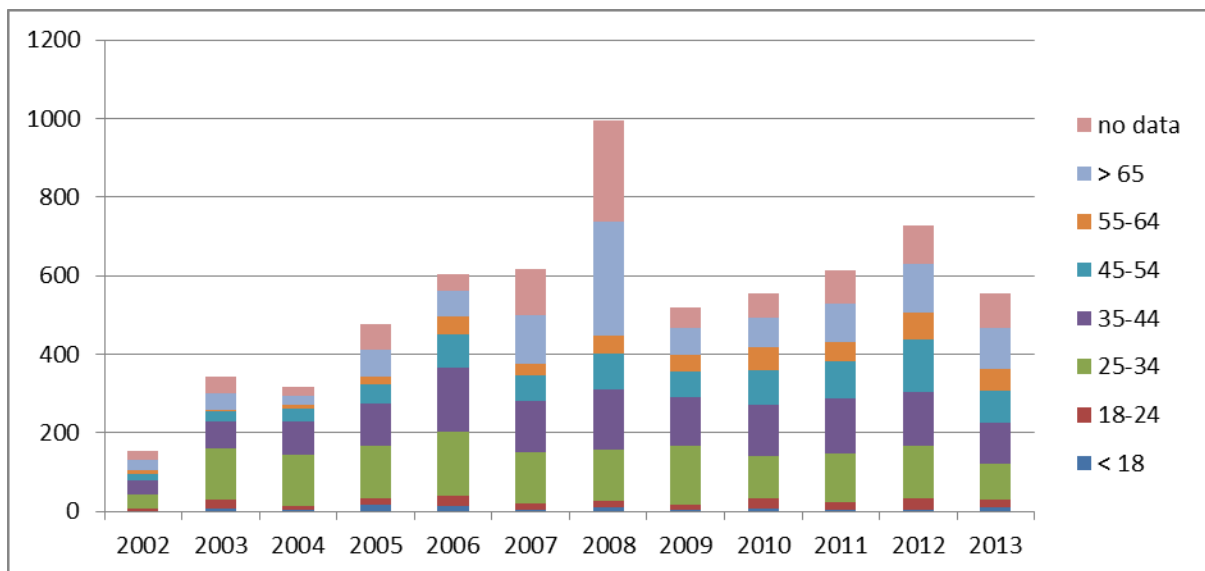


Figure 16. Age Distribution of Female Visitor to TRNP (2002-2013). Source: Tubbataha Management Office

Competitor Analysis

This section analyzes the competitive advantages and disadvantages of Tubbataha’s major competitors in dive tourism. Business competitors were identified based on their location, products, and services offered. The success of a site depends on some factors according to Bagadion and Soriano (2013):

- Quality of the product and services
- Seasonality of the product
- Availability of tourism infrastructure

- Human resource capacity

Within and around the Coral Triangle Region, other dive destinations include Thailand, Malaysia, Indonesia, and Papua New Guinea (Table 15). The different sites in the table vary in quality, which pertains to a variety of offerings for all dive preferences. Just outside the Coral Triangle there are other destinations including Palau, the Pacific Islands, and the Great Barrier Reef.

Table 15. Selected Southeast Asian Countries and their Dive Industry Profiles.

Criteria	Philippines	Malaysia	Indonesia	Thailand
<i>Seasonality</i>	Year-round	Year-round	Year-round	Year-round
<i>Connectivity</i>	Direct air access	Direct air access	Direct air access	Direct air access
<i>Dive highlights</i>	<ul style="list-style-type: none"> • WWII Shipwrecks • Mantas • Thresher Sharks • Whale Sharks • Macro Diving • World Heritage Site – Tubbataha Reef • Marine Life Biodiversity 	<ul style="list-style-type: none"> • Wildlife • Shipwrecks • Sharks • Turtles • Coral & Sponge Life • Whale Sharks & Mantas in season 	<ul style="list-style-type: none"> • Easy Wreck Diving • Drift Diving • Small Sharks • Mola mola and Mantas in season • Liveaboard sailing 	<ul style="list-style-type: none"> • Corals • Top-class Liveaboards • Whale Sharks & Mantas • Turtles • Pristine Remote Sites
<i>Markets</i>	<ul style="list-style-type: none"> • Korea • Japan • Taiwan • China/ Shanghai • Singapore • Hong Kong • USA • Germany • UK 	<ul style="list-style-type: none"> • Malaysia • China • India • Singapore • Korea 	<ul style="list-style-type: none"> • Australia • USA • Korea • Europe 	<ul style="list-style-type: none"> • US • Europe • Scandinavia • Israel • Korea • China
<i>Accommodation</i>	Budget and midrange travelers, with the occasional high-end resort	Low to midrange on the mainland, with Borneo geared for high-end	Caters to all tastes, with even Bali’s 5-star resorts offering good deals	Vast range of budget picks, good mid-range selection, limited high-end choices
<i>Hyperbaric chamber</i>	6	2	6	5
<i>Liveaboards</i>	15	2	58	38

Source: Department of Tourism

The Philippines is located at the apex of the Coral Triangle, the most diverse marine ecosystems on Earth. In terms of the variety of marine life, there is no better place to go diving. Other competitive advantages of Philippine diving according to the Department of Tourism are:

- Multi-diversity of marine life and attraction (smallest to biggest wildlife, shore to wreck)
- Year-round diving
- Most favorable conditions to discover or learn scuba diving
- Diverse topside attractions
- Ease of communication

Within the Philippines, the TRNP competes with other popular dive sites (Table 16).

Table 16. Other important dive sites in the Philippines.

Dive Site/Area	Feature	Type	Estimated cost of 5-day dive package (USD)
<i>Anilao, Mabini, Batangas (Verde Island Passage)</i>	Center of the center of marine shore fish biodiversity	Resort-based	700.00
<i>Puerto Galera, Mindoro Oriental (Verde Island passage)</i>	Center of the center of marine shore fish biodiversity	Resort-based	600.00
<i>Apo Reef, Mindoro Occidental</i>	World's second largest contiguous coral reef system and the largest in the country	Liveaboard/ Resort-based	550.00
<i>Busuanga, Palawan</i>	Best wreck diving	Resort-based	550.00
<i>Malapascua Island, Cebu</i>	Thresher shark cleaning station	Resort-based	600.00
<i>El Nido, Palawan</i>	Protected landscape and seascape	Resort-based	775.00
<i>Moalboal, Cebu</i>	Sardine run	Resort-based	500.00
<i>Boracay, Aklan</i>	Perfect beach	Resort-based	600.00
<i>Apo Island, Negros Oriental</i>	One of the world's best known community-organized marine sanctuaries	Resort-based	450.00
<i>Cabilao and Balicasag Island, Bohol</i>	Bohol Marine Triangle, significant marine biodiversity	Resort-based	485.00
<i>Sogod Bay, Leyte</i>	Emerging dive destination	Resort-based	500.00

Overall, the high coral cover, dense marine life, and high variety of life forms set Tubbataha above the rest. The coral landscape is the most outstanding feature of the TRNP among other dive sites. However, compared to the other sites, the TRNP falls short on accessibility due to distance and seasonality.

Megafauna like whale sharks, manta rays, turtles and reef sharks are among the more popular attractions in the Tubbataha Reefs. Although the TRNP could be singled out to have the most robust population of reef sharks compared to any other sites, other destinations in the Philippines also offer diving and/or interaction with these marine fauna. Several whale shark sites have emerged in the past decade including Donsol, Sorsogon, Oslob, Cebu, Puerto Princesa Bay, Palawan, and Sogod Bay, Leyte. These sites have the advantage of allowing non-divers to interact with these animals. The Manta Bowl in the Ticao Pass and the Bohol Sea are destinations for manta ray diving. Marine turtles are common throughout the Philippines but are found in great numbers in the TRNP.

Muck diving is becoming a popular niche activity for diving. Muck diving itself refers to dives that take place in protected bays and reefs often with soft sediment, leaves or black sand (Smith, 2011). The most popular sites for muck diving in the Philippines are in Anilao, Batangas and Apo Island, Dauin where mostly macrophotographers take interest.

In terms of price, Tubbataha trips cost more than the other sites mentioned. A dive package to Tubbataha costs around USD 2,000.00, compared to USD 500.00-700.00 in most of the resort-based dive facilities. The high cost of Tubbataha diving is mainly due to its distance from the mainland and the attendant fuel cost of getting there.

TRNP SUSTAINABLE TOURISM FRAMEWORK

TRNP is considered one of the best managed MPA in the Philippines and with this comes excellent standards in maintaining the park with its challenges. The elements described in Figure 17 are elements already addressed in the management set-up of the park, although some aspects may need more emphasis such as economic viability. Control mechanisms are already in place to ensure that the resources are protected from permitted activities in the park. Any developments, including tourism, will undergo thorough studies, consultation, and deliberation and approval from the TPAMB. The framework will be used with flexibility to ensure that all issues are addressed, particularly those that have not been foreseen in the current plans. In such cases, mitigation and adjustments to the existing management will be carried out.

<p style="text-align: center;"><i>Environmentally sound</i></p> <p>Sustainable tourism should not be degenerative to nature but instead enriches the natural resource base. It should value every living (biotic) and non-living (abiotic) component of nature.</p>	<p style="text-align: center;"><i>Economically viable</i></p> <p>Sustainable tourism should be self-sustaining and provide long term livelihood opportunities to the community.</p>
<p style="text-align: center;"><i>Socially just and humane</i></p> <p>Sustainable tourism should value the dignity, rights, and inherent abilities of local communities. As the primary beneficiary, they have the right to timely and accurate information, financing, and other basic needs that would help enhance their way of life.</p>	<p style="text-align: center;"><i>Culturally appropriate</i></p> <p>Sustainable tourism activities should be appropriate to the locality, and with respect to indigenous knowledge systems (IKS) and information, despite the inevitable access to introduced technologies.</p> <p>Gender role should actively take part in sustainable tourism development and enhancement.</p>
<p><i>Grounded on holistic science</i></p> <p>Sustainable tourism values the direct and indirect integration, interaction and interrelationships of the local ecosystem (environmental, socio-political, and economic).</p>	

Figure 17. Sustainable Tourism Framework Indicators. Readapted from Zamora, et. al., (2002) in Calanog et. al., (2012)

It will also consider as a guide the 10 Principles of tourism in World Heritage Sites (WHS) according to Lucas (2002), which are mostly incorporated in TRNP’s current management and are considered in the development of the TRNP Sustainable Tourism Plan:

1. that tourism respects ecological and socio-cultural values and World Heritage status;
2. that management plans be regularly updated and address the regional context and the tourism component;

3. that environmental assessments precede any approvals for recreational and commercial facilities;
4. that monitoring programs with indicators are taken into account in decision making;
5. that local people are involved so that they take pride in their heritage and benefit from tourism;
6. that cooperation with tourism interests is sought and promotion of the site is coordinated;
7. that all site staff are aware of World Heritage values and are adequately trained in visitor management;
8. that information and education programs ensure visitors and local people understand and respect the site;
9. that a substantial proportion of income from any entrance fee is allocated to site management; and
10. that the site helps promote the World Heritage concept.

TRNP Sustainable Tourism Management Framework

The tourism component of the TRNP should be viewed as an activity that can significantly contribute in each and every program that the TMO is set out to do through its four major programs as seen in Figure 18. Through the implementation of these programs, the goals of the TRNP shall be achieved increasing the chances of reaching sustainability.

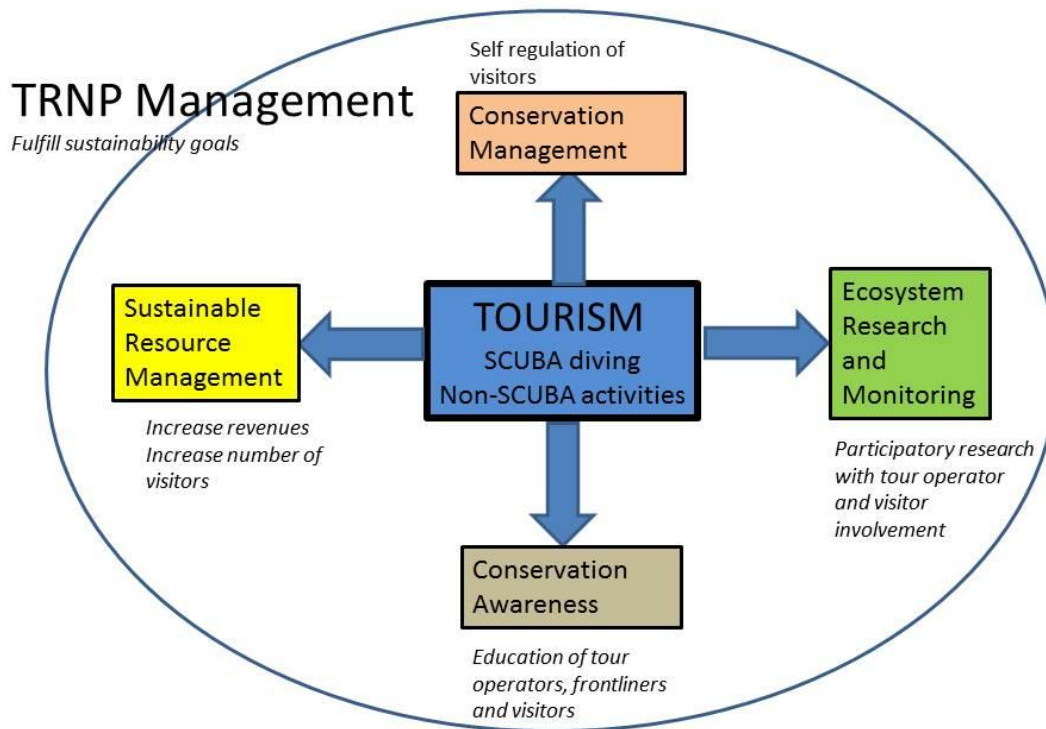


Figure 18. The Tubbataha Reefs Natural Park Sustainable Tourism Management Framework

The sustainable tourism management framework for TRNP relies heavily on economic considerations since the cost of managing the site is subsidized through the fees collected from the tourists and dive boat operators. Figure 19 illustrates that financial inputs, i.e., revenues, are critical elements in the effective management of the TRNP.

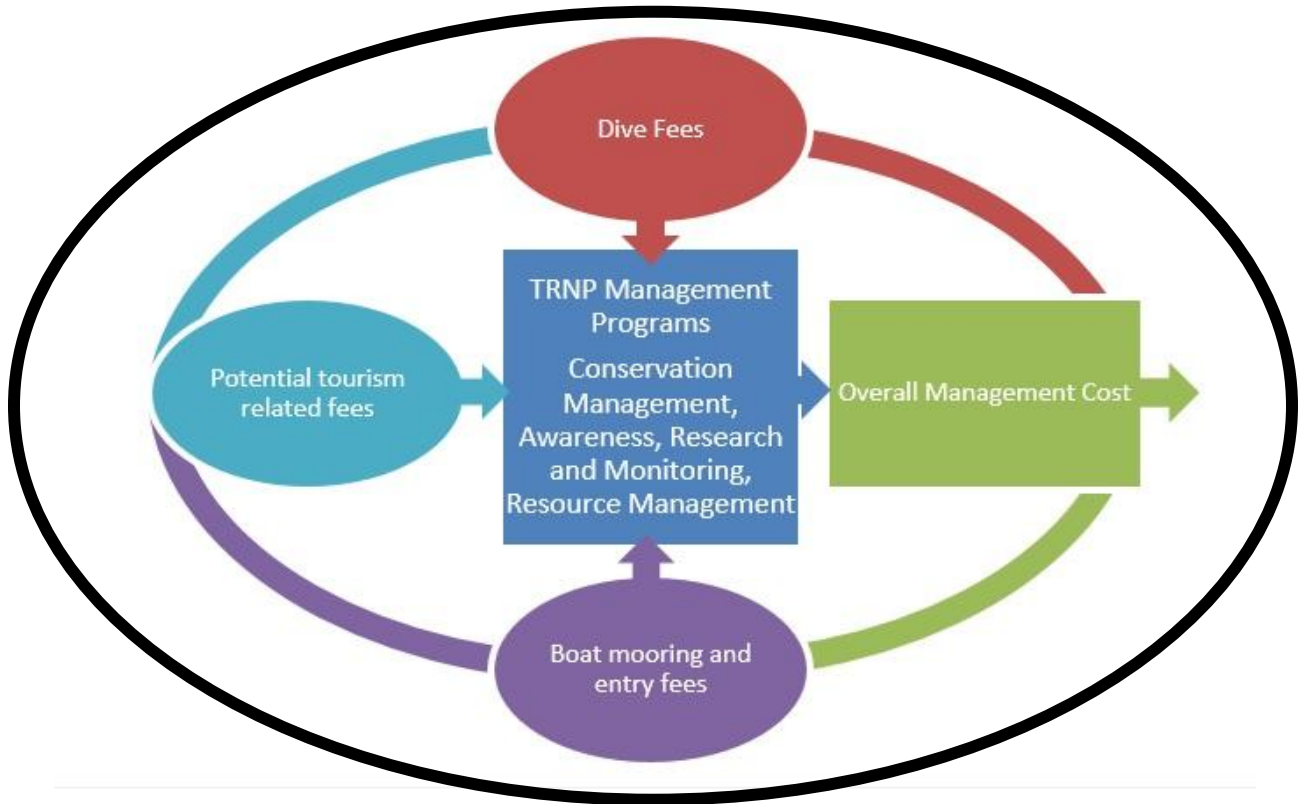


Figure 19. The Tubbataha Reefs Natural Park Sustainable Tourism Financial Framework.

It is a given that the dive fees and boat entry and mooring fees have been the sources of revenues for the park. However, the amounts generated over the years cover only a fraction of the required budget to effectively manage the site. By either increasing the number of divers and boats or introducing other tourist activities within the park, the amount of revenues generated for the management of TRNP could significantly increase. Financial viability is one of the key programs in managing the park to achieve its sustainability goals.

TRNP Tourism Stakeholders list

Table 17 shows the primary and secondary stakeholders identified in relation to tourism management in the TRNP. Primary stakeholders are those ultimately affected, either positively or negatively by the TPAMB’s actions. Any changes in its natural heritage attraction will have a direct impact on these

groups. Secondary stakeholders are the individuals or organizations which are indirectly affected by TPAMB's actions. These groups are often impacted indirectly from any changes regarding the heritage sites.

Table 17. Tourism Stakeholders to the TRNP.

Tourism Stakeholder	Category	Purpose	Role
SCUBA Divers	Primary	Leisure, education	Direct users
Diver boat operators and crew	Primary	Livelihood	Direct users, provides access to TRNP
Dive Guides	Primary	Livelihood	Direct users, front liners
Off-site tour operators (Puerto Princesa, Manila, or Visayas-based)	Primary	Livelihood	Indirect user
TMO	Primary	Management	Regulates tourism activity
Cagayancillo Municipality	Primary	Tax revenues, management, livelihood opportunities	Local community beneficiary
Puerto Princesa City	Secondary	Tax revenues	Main hub, access point, tourism promotion
Province of Palawan	Secondary	Tax revenues, management, fund source	PCSD jurisdiction, tourism promotions
Department of Tourism	Secondary	Develop and promote sites	Tourism promotions

All government offices including the National, Provincial and Municipal Governments, together with the tourism stakeholders benefit financially from the tourism activity in the TRNP either directly or indirectly.

Tourism Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

The planning framework allows the TMO to articulate their tourism concerns for the TRNP in terms of socioeconomic priorities and perceived readiness for development. Table 18 shows the output of a tourism SWOT analysis done with the TMO in July 2013.

Table 18. Tourism SWOT Analysis for the TRNP.

Strengths	Weaknesses	Opportunities	Threats
OUV-WHS/Ramsar Effective management Good relationship with service providers Exclusivity due to inaccessibility Good image/track record in diving and conservation	<p>Facilities</p> <p>Limited infrastructure (e.g. mooring buoys)</p> <p>Limited activities for tourists</p> <p>No medical support facility on site</p> <p>Site inaccessibility</p> <p>Tourism operations</p> <p>Lack of environmentally ethical local DMs</p> <p>Limited number of service providers</p> <p>Lack of coordination among dive boat operators</p> <p>Management</p> <p>Lack of regulatory standards for service providers (dive boats in disrepair affect image of TRNP diving)</p> <p>Gaps in tourism data, e.g., diver impact, carrying capacity</p> <p>No monitoring program for compliance with regulations</p>	<p>Financial support interest from other government and funding agencies</p> <p>Access because of planned facility improvement</p> <p>Projected increase in Philippine tourism volume</p> <p>There is still a lot of room for tourism activity diversification and diving volume increase</p>	<p>Marine debris and pollution from outside the park</p> <p>Tourism industry unreliability/volatility</p> <p>Maritime traffic increase</p> <p>Ship grounding incidents</p> <p>Security (peace and order issues in the Philippines)</p> <p>Increasing incidents of COTS, coral diseases, alien invasive, coral bleaching</p> <p>Climate change</p>

	<p>Awareness</p> <p>Limited promotion/marketing</p> <p>Lack of translated info materials</p> <p>Poor understanding of OUV content</p>		
	<p>External support</p> <p>PCSSD/DOT lack of involvement</p>		

TRNP Tourism Goal and Objectives

For its sustainable tourism program, the TMO plans to achieve the following under the TRNP Vision:

TRNP Vision	Effectively conserve the resources of TRNP contributing to equitable distribution of benefits and sustained socio-economic development for present and future generations.
TRNP Tourism Goal	Manage tourism to support conservation.
TRNP Tourism Objectives	<ol style="list-style-type: none"> 1. To increase revenues from tourism to cover a larger percentage of management cost; 2. To increase the appreciation towards TRNP as a tourist destination and conservation area; 3. To encourage voluntary compliance of visitors and operators; 4. To assist private and government sectors in promotion and marketing the TRNP as a tourist destination; 5. To provide high quality visitor experience; 6. To engage tourism stakeholders in research; and 7. To encourage tourism research.

TRNP SUSTAINABLE TOURISM PLAN

Strategic Direction

Despite the recognition of its wonders and mega-diversity by numerous international organizations and the media, the TRNP has yet to maximize the potential of these advantages to develop tourism in the park. The TRNP Sustainable Tourism Plan strives to maximize tourism’s economic impact while achieving effective conservation.

Three strategic directions and corresponding action plans are identified in order to achieve this goal:

1. Increase revenues from tourism.
2. Use tourism to raise awareness in marine conservation and TRNP.
3. Fill in management gaps to regulate tourism development and activities in the TRNP.

Increasing Tourism Revenues

Table 18 shows how a park can pay for itself via tourism revenues if it gets the volume of visitors as seen in the Puerto Princesa Subterranean River in Palawan and Apo Island Protected Landscape and Seascape (Bagadion and Soriano, 2013). Based on the study, the TRNP could not perform as well as the other sites mainly because of seasonal access. But, in terms of environmental preservation, this is an advantage as the reefs are not subjected to tourism pressures and impacts for most of the year. The trade-off, however, is low tourism revenues.

Table 18. Profile of Select Protected Areas in the Philippines in 2010. Source: Bagadion and Soriano (2013).

	Protected Areas				
Indicators/ Variables	Tubbataha Reefs Natural Park (TRNP) Palawan	Puerto Princesa Subterranean River National Park (PPSRNP) Palawan	Apo Island Protected Landscape & Seascape (AIPLS) Negros Oriental	Olango Island Wildlife Sanctuary (OIWS) Cebu	Rajah Sikatuna Protected Landscape (RSPL) Bohol
Area (hectares)	97,030	22,209	681	1,030	10,452
Number of in- situ staff*	13	60	50	4	3

<i>Ratio of staff to area (in hectares)</i>	1:7,436	1:370	1:14	1:257	1:3,484
<i>Main tourist activities</i>	Diving	River/ cave tour	Diving, snorkeling	Bird watching	Bird watching, camping
<i>Year started charging user fees</i>	1998	1993	1999	1996	1999
<i>Visitor entry fee **</i>	Php3,000	Php275	Php100 (entrance) Php300 (diving)	Php20 (local); Php100 (foreign)	Php20 (local); Php100 (foreign)
<i>Annual receipts from tourism ***</i>	Php4.4 M	Php16.5 M	Php3.9M	Php0.163 M	Php0.207M
<i>Tourism receipts as % of total budget</i>	37%	139%	≈100%****	39%	50%
<i>Annual budget (2010) in Php</i>	14 M	11.8M	≤ 3.9M*****	0.41	0.407

*Number excludes the Park Superintendent. PaSu holds office in PENRO;

** Other user fees were charged; prices as of 2010

***TRNP received about Php6.5. M from grants and payment of staff salaries, services and in-kind contributions from the Provincial Government of Palawan, the Philippine Navy, and Philippine Coast Guard on top of its receipts from tourism. The amounts for Apo Island, Olango and Rajah Sikatuna reflect the 75% share of the protected area from the IPAF with the 25% remitted to the National Treasury.

****The actual budget for AIPLS was unavailable at the time of research.

Despite the exceptional quality of the tourism product that Tubbataha offers, its limited access (seasonality) is a major factor impinging upon the number of visitors, and thereby, the amount of tourism revenues that it generates. With only about 1,500 visitors annually, tourism revenues are inadequate to defray the cost of conservation. It is therefore critical to devise other means of increasing revenues within the tourism context. However, the pursuit of revenues is acceptable only as far as it does not adversely affect the ecological condition of the park. With this in mind, the following options may be worthwhile for consideration: Increase in number of tourists,

The NTDP identifies diving and marine sports as one of the core tourism products of the country. Tubbataha is part of the priority development duster of Palawan, with Puerto Princesa as the main hub.

TRNP would benefit greatly from this planned development program. The strategies for the existing clusters, including Tubbataha are:

- improvement of safety and security, medical and evacuation services at dive and marine sports centers;
- undertake major refurbishment of existing diving and marine sport establishments and expand these to provide capacity for growth; and
- professionalize the diving and marine sports sector (Department of Tourism, 2012).

The NTDP has identified the following market segments in which tourism promotions shall be intensified:

1. Key markets (large existing share, more than 200,000 arrivals p.a.)
 - South Korea
 - USA
 - Japan
2. Strategic markets (moderate existing share, 100,000-200,000 arrivals p.a.)
 - Singapore
 - Malaysia
 - Australia
 - Canada
 - Taiwan
 - Hong Kong
3. Opportunity/niche markets (small existing share, less than 100,000 arrivals p.a.)
 - India
 - Scandinavia
 - Russia
 - Germany
 - UK

With the strategic plans set in the NTDP for the development of dive tourism in the Philippines, tourism in Tubbataha is expected to continue its growth. Despite decline in visitor arrivals and collections in the last two years, it still posted a general growth since 2002. The figures in Table 19 show the actual data for years 2002-2013 and forecast for years 2014-2018. The compounded annual growth rates were solely based on the figures from 2002-2013.

Table 19. Forecast for Five Years for TRNP Based on the Growth Rate Trend.

	Year	Number of Trips	Vessel Fees	Number of Tourists	Visitor Fees	Vessel + Visitor Fee
Actual	2002	55	140,263.00	508	952,101.22	1,092,364.22
	2003	71	183,250.00	958	1,572,938.00	1,756,188.00
	2004	75	297,000.00	1018	2,002,750.00	2,299,750.00

	2005	88	356,748.00	1,471	2,728,625.00	3,085,373.00
	2006	76	447,000.00	1,703	4,421,250.00	4,868,250.00
	2007	76	358,500.00	1,395	3,680,250.00	4,038,750.00
	2008	88	382,500.00	1,459	3,781,500.00	4,164,000.00
	2009	84	376,500.00	1,427	3,705,500.00	4,082,000.00
	2010	98	475,500.00	1,689	4,385,000.00	4,860,500.00
	2011	106	484,500.00	1,850	4,829,500.00	5,314,000.00
	2012	107	490,500.00	1,803	4,691,500.00	5,182,000.00
	2013	101	417,000.00	1,485	3,689,250.00	4,106,250.00
	Compounded Annual Growth Rate (2002-2013)	5%	10%	9%	12%	12%
Forecast	2014	106	456,634.58	1,619	4,131,960.00	4,599,000.00
	2015	112	500,036.31	1,764	4,627,795.20	5,150,880.00
	2016	118	547,563.24	1,923	5,183,130.62	5,768,985.60
	2017	124	599,607.47	2,096	5,805,106.30	6,461,263.87
	2018	130	656,598.33	2,285	6,501,719.05	7,236,615.54

Assumptions:

1. Growth forecasts from 2014-2018 have annual growth rate based on CAGR from 2002-2013.

$$\text{Forecast} = (\text{last year} * \text{CAGR}) + \text{last year}$$

2. No increase in any fees.

3. Does not account for inflation.

4. Number of trips does not only rely on regular tour operators.

Increasing the number of tourists to TRNP would be more straightforward with national support for the development of the scuba diving tourism infrastructure and human resource capacity. TMO needs to collaborate closely with the DOT, specifically the Philippine Commission on Sports Scuba Diving (PCSSD) and the Dive Market Development Group.

Increase in conservation fee

According to the coral valuation study conducted by Conservation International – Philippines in 2006, the recreational value of TRNP is P 3,479.00. This leaves room for an increase in conservation fees. Raising fees would increase revenues, but could also deter and reduce visitor arrivals. In order to assess the practicality of raising fees in Tubbataha, a willingness-to-pay study must be conducted and then consulted with the stakeholders.

If the projections are correct and the budgetary requirement of the park, with 5% inflation per year, by 2018, almost 41% of the budget requirement could be generated from tourism (Table 19); or up to 51% of the budget by 2018. This is contingent upon an increase in conservation fees from Php3,000.00 to 4,000.00 (Table 20).

However, revenues from tourism may not always be reliable due to the volatility of tourism markets. Therefore, tourism is not recommended as the only fund source for the TRNP. A mixture of various funding streams both traditional and non-traditional, including tourism, needs to be adopted for sustainable financing.

The increase in visitor’s fee from Php3,000.00 to Php3,500.00 and Php4,000.00 will have the following results in the coming years (Table 20). Note that this excludes vessel entry fees and assumes that each visitor pays the full rate every entry.

Table 20. Revenues from Visitor’s Fees for TRNP when increased.

Year	Expected Number of Divers	Visitor Fees (Php)		
		3,000.00	3,500.00	4,000.00
2014	1,619	4,857,000.00	5,666,500.00	6,476,000.00
2015	1,764	5,292,000.00	6,174,000.00	7,056,000.00
2016	1,923	5,769,000.00	6,730,500.00	7,692,000.00
2017	2,096	6,288,000.00	7,336,000.00	8,384,000.00
2018	2,285	6,855,000.00	7,997,500.00	9,140,000.00

Increase in number of dive boats operating in TRNP

As the number of boats and the seasonality of trips are limiting factors to the number of trips made, an increase in the number of boats operating in the TRNP has the potential to increase the number of visitors. However, the TMO does not have direct influence on the number of boats that operate in the TRNP as this is dependent on the private business sector. TMO could only encourage and support potential operators. It may be necessary to tap the National and Local Governments to provide incentives for such ventures to encourage more investments in liveaboard dive boats.

Increase in non-diver visitors through diversification of activities

One way of increasing the number of visitors is by introducing other activities that are not specific for divers. In 2009, WWF-Philippines pioneered a non-diver tour package dubbed the World Heritage Expedition. It was a packaged cruise that ran for five days and four nights, visiting three World Heritage Sites—Miag-ao Church, TRNP, and the Puerto Princesa Underground River. A total of four trips were conducted, however, the expedition was discontinued. No reports are available to assess the viability of the tour product.

New activities will be developed to capture the non-diver market. These will be implemented in order to expand and diversify the market of Tubbataha. New activities to be offered are :

Snorkeling

Snorkeling appears to be the most feasible non-diver activity in TRNP. Tubbataha is very ideal for snorkeling because the whole range of marine biodiversity is observable just at the edge of the reef.

Magafauna such as turtles and sharks are already common in these shallow areas. However, there is a need to study the compatibility of the said activity with the noted increase in the population of the predatory tiger sharks in TRNP. Tiger shark attacks on snorkelers are rare but probable. Visitors need to be apprised of this potential risk. Further, snorkeling protocols need to be developed for safety as currents are strong and unpredictable.

TMO must initiate the conduct of a study on the viability of offering snorkeling trips to TRNP. The study could include a scoping session on the subject during the annual dive operator's consultation conducted by TMO before or early in the scuba diving season. Additionally, a closer look at the experiences and lessons from the WWF WH tours must be done. It must also include more research on tiger shark-human interactions so that a realistic view of risks could be generated. Finally, the private sector needs to be encouraged to offer the product.

Bird Watching

With 100 species of resident and migratory birds identified, plus the presence of the rare species Christmas Island frigate bird and the endemic sub-species of noddy, Tubbataha is a potential haven for bird watchers. Viewing birds with binoculars from a boat is ideal for observations and for photography. This trip may be offered in conjunction with the other possible leisure activities on offer, e.g., with snorkeling. Determining whether there is a market for trips dedicated to bird watching is an important first step.

Sailing

Visits on private sailing boats/yachts have been observed to be on the rise since 2003, when TMO first recorded their arrival to TRNP. An average of five sail boats have visited TRNP in the last decade with the most number (11) being recorded in 2013. Called nautical tourism, the rise of this activity could contribute substantial revenues for management.

Puerto Princesa has been identified in the NDTP as one of the existing clusters for nautical tourism in the Philippines. Tubbataha could benefit from the of nautical tourism by the DOT as its location makes it an ideal transit point for recreational sailors. Aside from sailing being a recreational activity in itself, snorkeling, bird watching and other activities make up for a diverse menu of recreational options in TRNP.

There are other adjunct activities that could be offered while in TRNP. Although these may not merit a dedicated trip to TRNP, they increase the recreational options of visitors, thereby, enriching the Tubbataha experience.

Glass-bottomed boat

Glass-bottomed boats allow tourists, regardless of ability or age, to experience the underwater world. These boats could be provided in the TRNP for use by non-divers. It is a worthwhile addition to the list of activities to do while in the park. It is suggested that this vessel be provided as an investment of one of the dive boat operators, be maintained within the TRNP by the rangers, and operated by the owners during tourist season,

Dolphin and whale watching

Cetaceans are present within the TRNP, but, the distance travelled is unusual for a dedicated dolphin and whale watching tour. There are also no unique species within the park to merit such a journey.

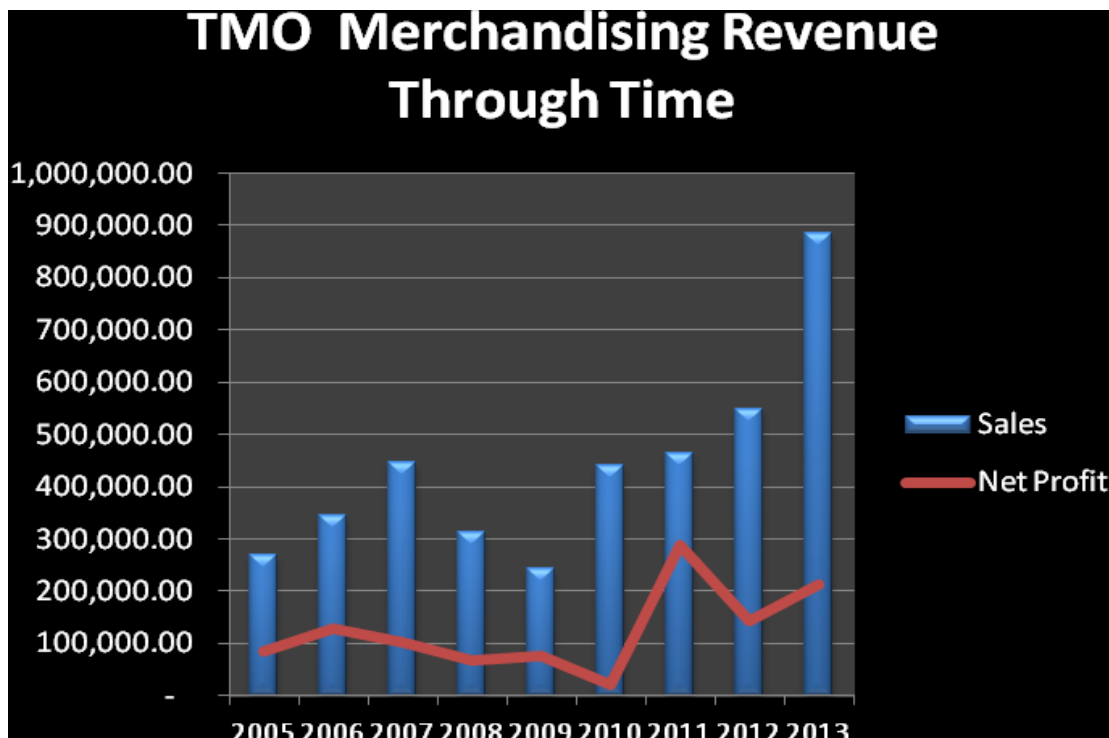
Other water sports

Other water sports activities include kayaking, kite boarding, wind surfing. Although a possible alternate activity on the liveboards, the TRNP is not seen as a main destination specific for these activities. The use of motorized sports equipment, such as jet skis are not allowed in the park, as per Administrative Order No. 1 Rule 20 (c).

It will be necessary to work not just to develop and promote these new activities with dive boat operators but more especially with other tour operators not operating in the park. A familiarization trip may be conducted as a first step to promote these new activities to travel agencies and tour operators.

With the development of new tourism activities, studies must be conducted to determine the feasibility and sustainability of such activities. New protocols and guidelines also need to be established with focus on zoning.

Increased revenues through merchandizing



Tubbataha merchandise is available on site and online. Current products offered are shirts, caps and reference books. Recently, merchandise was released in the market which includes partnerships with MadKahuna Surf and Sports Shop carrying the Tubbataha official logo.

An assessment of Filipino brands shall be conducted to identify which brand TRNP could partner with in launching an exclusive line of products with the dual goals of promoting Tubbataha and generating revenues for management.

Site Development Scenario

A site development plan needs to be made. For now, the expected future scenario, with TRNP receiving higher visitor numbers, include:

High-speed crafts for mass visitor transport

Improved and cheaper transport technologies may make it highly possible for new sea crafts to visit Tubbataha in the near future. With this, more people may decide to go to the site primarily because of the shorter travel time.

Access by air on a helicopter through the construction of a helipad as part of the new ranger's station could also improve or alter the duration of visits to short-term or even day-visits..

Manage visitor flow

A detailed study on dive boat and diver preference to specific dive sites should be made starting the next diving season. The results of this study will help the TMO formulate a flow management system that will prevent pressure on few specific dive sites by ensuring that boats and divers are appropriately distributed. This will also ensure that everybody will have an equal amount of time and quality of dive experience while in TRNP.

Installation of pontoons or platforms for visitors

Since the islands will remain off-limits to recreational visitors, pontoons or platforms could be installed in the most appropriate areas, such as near the ranger station. This will help control visitor movement and prevent any untoward ecological impacts that may occur if no such visitor control mechanism is put into place.

Establish areas reserved for snorkeling and other activities

To ensure safety and visitor management, sites identified for snorkeling should be properly zoned with marker buoys.

Tourism management and protection

With the possible entry of non-diving tourists, the TMO will need to conduct visitor control and protection patrols in areas where people are allowed to stay. This can be done in line with patrols conducted by marine park rangers monitoring the reef areas.

Improving TRNP for Tourism

Infrastructure Enhancement

The infrastructure provided within the TRNP is important to accommodate its visitors. The IRR prohibits the setting up of structures, except for the TMO facilities, such as the ranger station. The mooring infrastructure provided by the TMO is Halas-type moorings. There are 19 installed in the reefs (Fig 1). It has been suggested that more mooring buoys be installed to utilize more areas of park for diving. Dive boat operators request for additional mooring buoys especially in the South Atoll and at the ranger station. The additional mooring buoys will ensure that the other dive sites/stops in the park are available to boats. The main limiting factor in establishing new moorings, however, would be the appropriate sites for such an installation. There is also a need to rehabilitate or replace the old buoys.

The construction of a new ranger station, targeted for 2015, will provide a better platform to provide information as well as display and sell merchandise within the park (Fig. 1). A tour of this new facility will also provide visitors information for a better understanding of the operations in the park and its efforts at marine conservation. The facility will have a helicopter landing platform providing a venue to increase accessibility to the park. The construction of the helipad and possible access by tourists to TRNP could significantly add to the number of visitors to the area.

Helicopter access would make it possible to visit the site and leave in a single day thus increasing the type of visitors to the area. People with short amounts of time available can then decide to include TRNP in their planned trips as they would not be required to take extended travels in one particular site. TMO will have another source of income from the landing fees that can be charged from helicopter operators aside from the usual visitor fees.

Improve Park Services

Good tourism service within the park improves the quality of visitor experience. The TMO needs to provide updated information about the park to its users constantly through its office and online portals. The following are basic information are to be provided:

1. Interpretation in the park including maps and description
2. Safety reminders
3. Codes of Conduct
4. Regulation and guidelines within the park
5. Permit processing and fees information
6. Information on weather, dive status, biodiversity updates
7. Reporting and documenting violations

The TMO staff, website and collaterals as well as books and reference guides need to provide these information. The TMO also provides briefings on park rules and regulations for the visitors and tour operators to increase compliance.

There is, however, a need to improve the medical support facility on site, which will duly be addressed upon the completion of the new ranger station. Medical support services that cannot be provided on-site shall be provided off-site through pre-established agreements and quick-access protocols.

Security within the TRNP still has room for improvement but is currently sufficient to address the needs of the visitors in the park through its rangers.

It is important that the TMO maintains good partnership with all the boat operators as their concerns could easily be addressed by the management. The cooperation can also be used to further TMO's conservation objectives through its users, in this case the tour operators and visitors.

TMO needs focus on dive operators, boat managers and dive masters whose inputs on how to improve management must be sought through formal and informal means. Annual briefings of crew members of dive boats will be pursued. An orientation program which aims to increase the understanding and appreciation of biodiversity and management efforts by diving professionals needs to be put in place. Being in direct contact with tourists, they have opportunity to educate and heighten the visitor experience of their guests.

Improving Tourism Management

Regulation of Tourism Activities

As tourism activities are considered disruptive to an ecosystem, it is the role of the management to minimize or negate the effects it will bring into the park. The IRR of the Tubbataha Act addresses most of the concerns regarding direct disturbance to the water, flora, fauna, and abiotic elements within the park. Regulatory gaps and other concerns, especially with emerging activities and issues, should be addressed by the TPAMB.

Regulation of Service Provider Standards

The Maritime Industry Authority (MARINA) is the appropriate government agency that certifies the seaworthiness of watercraft. As proof of inspection by the agency, TMO requires dive operators to submit a Certificate of Philippine Registry, Passenger Safety Certificate, and the Minimum Safe manning Certificate. Collectively, these documents prove that the vessel is authorized to operate in the country, that it is compliant with international regulations pertaining to the built, machinery and life-saving paraphernalia, and that it is manned by licensed seamen. However, there have been incidents of engine failure of boats operating in TRNP. This is a safety risk and causes cancellation of trips. Cancellations are unwelcome developments because they have negative effects on the experience of tourists and on the revenue stream of TRNP. A study on how the TMO could address this issue needs to be consulted with the boat operators and the MARINA.

Liveboard operators will be encouraged to form an organized group to deal with safety and crisis management issues, as well as cooperation among the dive operators. Possible objectives of such a group could be:

- To forge national alliances with liveaboard operators to enhance and promote Philippine diving.
- To provide members with dynamic and proactive education and training, product development, programs & fellowship, ways and means and networking, and work closely and cooperatively with industry partners for the common good of Philippine diving tourism.
- To collectively practice the highest ethical standards and Corporate Social Responsibility and become advocates of responsible diving and tourism.

TMO is expected to work closely with the association and, in the future, require membership for those wishing to gain access to the TRNP. The quality of dive guides should also be improved through certifications that may be developed by the TMO.

Improve Compliance of Park Users to Rules and Regulations

To enhance compliance to rules and regulations, TMO will make sure that these are clear to all leisure industry stakeholders. However, without a monitoring program to check on the divers, compliance to tourism guidelines and regulation is difficult to determine. The TMO needs to develop and implement a dive monitoring program in collaboration with the dive operators themselves. It is accepted that not all dives in all liveaboards could be monitored, so random checking might be the best way to do it, but only if and when the TMO is able to deploy more rangers to the site to perform this special task.

Self-regulation by tourists and boat operators is highly encouraged. TMO might have to invest more effort in preparing the frontliners such as the divemasters and ship crew to monitor violations and report these as they occur. Tapping their employers (boat owners) to support this endeavor is a given. TMO needs to develop protocols on how to implement the monitoring, and reporting procedures of even minor incidents. A certification of the dive guides that will ensure the quality of their understanding and skills in implementing environmentally ethical practices will be sought.

It is recommended that dive operators be encouraged to hire the services of at least one accredited dive master/dive guide based in Palawan, preferably Palaweños, during each trip. Aside from conforming with sustainable tourism principles that advocate that locals benefit from tourism as 'locals' have more at stake and affinity with the park and are assumed to be more concerned with protecting the resources in their own backyards.

Aside from the guides, all users must be made aware of park rules and regulations and of penal provisions for non-compliance. Information is currently being disseminated, brochures, and pre-briefing on-board dive boats. It is recommended that that an audio visual presentation be produced for distribution to dive operators. It is best to explain to the visitors why these rules exist to engender voluntary compliance. Special attention should be given to underwater photographers.

Promote Best Practices

The TMO needs to determine the best practices of the dive tour operators in terms of helping conserve the park. A workshop with tourism operators to establish best environmental practices and minimum ecological operating standards must be conducted. These practices should be shared among the operators for them to improve the standards of performance within the park. Awards may even be given to highly recognizable performers which will encourage the others to follow suit.

To increase the standard of operations in the park, a certification system for boat operators and dive guides may be necessary. The best system on how to do this in consultation with the affected parties must be studied. There are voluntary certification mechanisms for dive operators, such as Green Fins and PADI that may be applied. Attendance of seminars and briefings of the TMO may be required of the operators and their staff to be able to secure a permit to enter the Park.

The DOT is expected to require all dive boats operators to seek accreditation with the Philippine Commission on Sports Scuba Diving. When in place as it is still being developed by the DOT, this accreditation will be an additional requirement for entry to TRNP. An example of some criteria that 'green' tour operators in the TRNP may be required to satisfy are based on Crinon's Green Stars for Accreditation of Ecotourism Operators ((Koeman, 2006):

- having a business plan that outlines environmental ethic and practice
- using environmentally friendly products and engaging in recycling practices
- providing good quality pre and post information to the intending visitor
- containing high local/indigenous participation/expertise
- providing high integrity interesting/entertaining educational/interpretive information
- providing high level of staff training about the natural and cultural environment
- providing high net benefit for the local community
- visitor experiences are of relatively undisturbed natural environment
- having management plan (including capacity limits or limits to acceptable change)
- involving personalized/guided small group interaction
- using low/medium cost/low impact accommodation and infrastructure
- using facilities that are ecologically designed and operated
- monitoring and response mechanisms are in place up-front
- contributing revenue to, or is part of conservation program

Many versions of certification programs are out there and adaptations to these are worth exploring to find the right fit for Tubbataha's and their user's needs. Park management needs to identify the suite of indicators that would best ensure achievement of conservation *vis a vis* tourism goals.

Promoting Cooperation with Tourism Stakeholders

The TMO shall provide a venue where stakeholders can express their views and recommendations for the enhancement of the management of the Park. The dive operator' consultation conducted by TMO has been institutionalized in the TRNP Management Plan and in its annual iteration, the Work and Financial Plan. Effort needs to be exerted to ensure that these consultations take place at the beginning of the season to report any recent developments that could be of interest to tourists. The consultations also provide dive operators opportunity to meet each other in a formal setting to discuss diving operations in the park.

Lines of communication with dive operators need to be maintained throughout the year. Dive operators participate in rule-making, planning, implementation and monitoring. Keeping them informed and involved year-round enables them to make meaningful contributions to decision-making for TRNP.

Research and Tourism

Research is one of the principles for sustainable tourism. Effective data collection and analysis is essential to help identify and solve problems to the benefit of destinations, the industry and consumers (Koeman, 2006).

Limits of Acceptable Change

It might not be as important in the next five years to determine the carrying capacity and the limiting factors that dictate sustainable numbers in the Park as the tourism growth is still manageable. It is stated that carrying capacity may have limited practical application in MPAs and suggests the concept of Limits of Acceptable Change may be more applicable (IUCN, 2004). There will be a need to discuss a ceiling number of visitors per area per year after 5 years as the projected numbers until then (over 2,200) is generally considered still within the parks targeted ceiling of 3,000 visitors that needs to be investigated further on its viability. This number will be reached in 2023 for divers, 10 years from now.

Any unexpected changes in visitor numbers must be monitored because changes in markets and demand may occur overnight and the TMO would need to adjust to these developments.

Tourism Related Research

There is a need to conduct studies to help improve the tourism operations of the private sector, and the delivery of support by the TMO. A simple visitor exit survey can shed light on the satisfaction of tourists and identify problems that need to be addressed. Other studies would need to be identified based on the goals of the TMO. Priority topics could include: divers' impacts on the reefs and other marine life, economic impact and value chain, and business feasibility studies related to tourism. Partnerships with the academe and tourism consultancies could be tapped to determine and conduct the studies.

Tourist Participation in Biological Research

Observations by tourists during their dives in Tubbataha may be used to complement monitoring and data gathering to feed into the TRNP research program. Information such as presence of indicator and unusual species, COTs, coral bleaching, and damages from the tourism activities can be easily monitored by divers as they sweep through the reefs several times a day. An easily implementable data collection system with forms, guidebooks and submission scheme may be established. Incentives should be identified to encourage participation and submission of data.

Increase Conservation Awareness

The TMO is in a very unique position to promote marine conservation maximizing the status of TRNP as one of the best examples of a well-managed protected area. The OUV could be one of the main messages but would need translated into something palatable. The idea is to recruit all visitors and

stakeholders of the park as its conservation ambassadors. Stewardship will be encouraged through education. The suggested activities for the different target sectors are listed below. The TMO will have to engage the primary stakeholders and need external support for activities targeting the general public.

Tour Operators

- Coordination with dive boat management and owners regarding park updates and existing rules and regulations
- A detailed briefing for dive masters and tour coordinators before the dive season.
- Regular know-your-reef seminars that would introduce ecology to tourism frontliners to enhance their naturalist guiding ability as well as increase their appreciation and understanding of the ecological processes in the park.

Visitors

- Information materials on park rules and regulations for foreign tourists translated into various languages other than English such as Korean, German, French, Russian, Japanese, and Mandarin to ensure that the visitors comprehend these.
- A pre-departure briefing on board the vessels for guests before deployment to the Park.

General Public

- Conduct regular online campaigns to disseminate not only information about the park and its biodiversity, but the issues that affects it as well.
- Participate in public events such as festivals and community celebrations as well as travel trade shows such as the Philippine Travel Mart to increase exposure of the TRNP
- Approach various media outlets such a radio, television, and newspapers to feature the TRNP

Government agencies

There is a need to increase support for the Park in terms finances and awareness at the local and national levels. Nationally, there is a need for promotional and development support from the Department of Tourism. One way is to engage various government offices in TRNP-related activities or projects. TMO has been encouraged to prepare and use an ‘elevator speech’ as a means of convincing busy various government officials on the importance of the TRNP and its need for support.

Seek the support of the city of Puerto Princesa City to increase the number of dive boat operators and tourists by providing incentives such as tax breaks, easier permit acquisition, and registration facilitation. Promotional activities such as dive shows and related events can be hosted by the city. The main motivation for the city is the revenues it generates from tourist and investor expenditures while in the city thru the purchase of supplies in Puerto Princesa. The city should also consider Tubbataha as a high value, high profile tourism product that could create market appreciation of the quality of its destinations like how they popularized the PPSRNP through vigorous advertising for it to be listed as one of the natural wonders of the world Dialogues should be conducted between the TMO, the city officials and the tourism private sector.

The DOT with Puerto Princesa City may invest in the development and promotion of new dive routes and circuit which includes TRNP as a major stop, provide schemes to encourage additional dive boats, and tap new market segments.

Support to the Beneficiary Community

The community beneficiary of the TRNP is the Municipality of Cagayandillo. The potential for more support particularly in providing livelihood and empowering the people should be explored especially in aspects that could involve tourism like food, cultural, and historical tours in the island. Others include production and selling of souvenir items and crafts, transport and food services, tour guiding, and creation of lodging facilities among others.

Marketing the TRNP

There is a need to create a comprehensive and competitive marketing plan to increase awareness on the beauty and significance of Tubbataha, and solicit support from the different stakeholders in promoting it. The TMO should play a supporting role in marketing although this is not their mandate or core competence. Marketing should therefore be carried out in collaboration with the appropriate agencies and stakeholders.

Marketing Strategy

This marketing plan aims to assert Tubbataha's flagship dive site status in the Philippines. At the end of 2018, the TRNP should have:

- Accommodated 2,285 tourists at 9% annual growth
- Conducted 130 trips at 5% annual growth
- Collected Php7,236,615.54 for both vessel and visitor fees at 12% annual growth
- Established non-diving activities as regular tourism offerings of the park with at least two tours of this type each dive season.

Market segmentation

Based on the volume of tourist arrivals from various countries, the following market segments are identified for TRNP to focus their marketing activities on.

- Primary market
 - 100 + average annual visitors
 - Domestic, USA and Japan
- Secondary market
 - 60-100 average annual visitors
 - Germany, France, China
- Tertiary market
 - Less than 60 average annual visitors
 - Switzerland, Russia, UK, South Korea, Belgium

The NTDP identified twelve priority markets for diving. These are South Korea, USA, Japan, Australia, Taiwan, Hong Kong, Singapore, Canada, UK, Germany, India and Russia. Six of these are also included in the top 10 foreign source markets of Tubbataha.

Table 21 below shows which markets should be focused on. The assumptions for minimal to strong growth are based on the targets of the NTDP. Markets with growth projections of more than 15% in 2016 are for strong growth, 10% - 15% for average growth, and less than 10% for minimal growth.

Table 21. Market Focus of TRNP

Market Segment	Minimal Growth	Average Growth	Strong Growth
<i>Primary Market > 100 visitors</i>	Japan		Domestic, USA
<i>Secondary Market 60 – 100 visitors</i>		Germany	France, China
<i>Tertiary Market < 60 visitors</i>	Switzerland, Belgium	UK, Taiwan, Canada	Russia, South Korea, Australia, ASEAN, Hong Kong, India

Market Positioning

To firm up its image and marketing, it may be necessary to re-brand and create a new image for the TRNP. There is a need to rebrand TRNP not just “exclusively” for scuba diving. Although diving has been and will be the most important tourism use for the site, other market segments will have to know about the possibility of visiting the park and getting engaged in high quality travel experience without necessarily having to go scuba diving.

With this, the rebranding of TRNP should focus on the area as a premium natural destination representing the last frontiers in natural destinations. This can be done by including graphic presentation of the islands, the birds and non-diving water activities such as snorkeling, glass bottom boats, and kayaking. A professional PR firm may be engaged as a partner in conceptualizing the Tubbataha make-over, if necessary, perhaps develops a catchy tagline to encourage visitations. It is recommended that the Tubbataha trademark be registered as this would be advantageous in merchandizing.

The suggested brand pyramid (Figure 20) illustrates how a Tubbataha brand is established grounded on its main strengths. It shows the development of the brand based on all market assessment activities done leading towards the brand essence that should be lived out by all stakeholders that tourists should

be able to experience it and potential markets be enticed to visit Tubbataha. All marketing activities should incorporate the brand essence. It should be noted that the rational attributes corresponds to the TRNP OUV. There is a need to develop this further through a workshop.

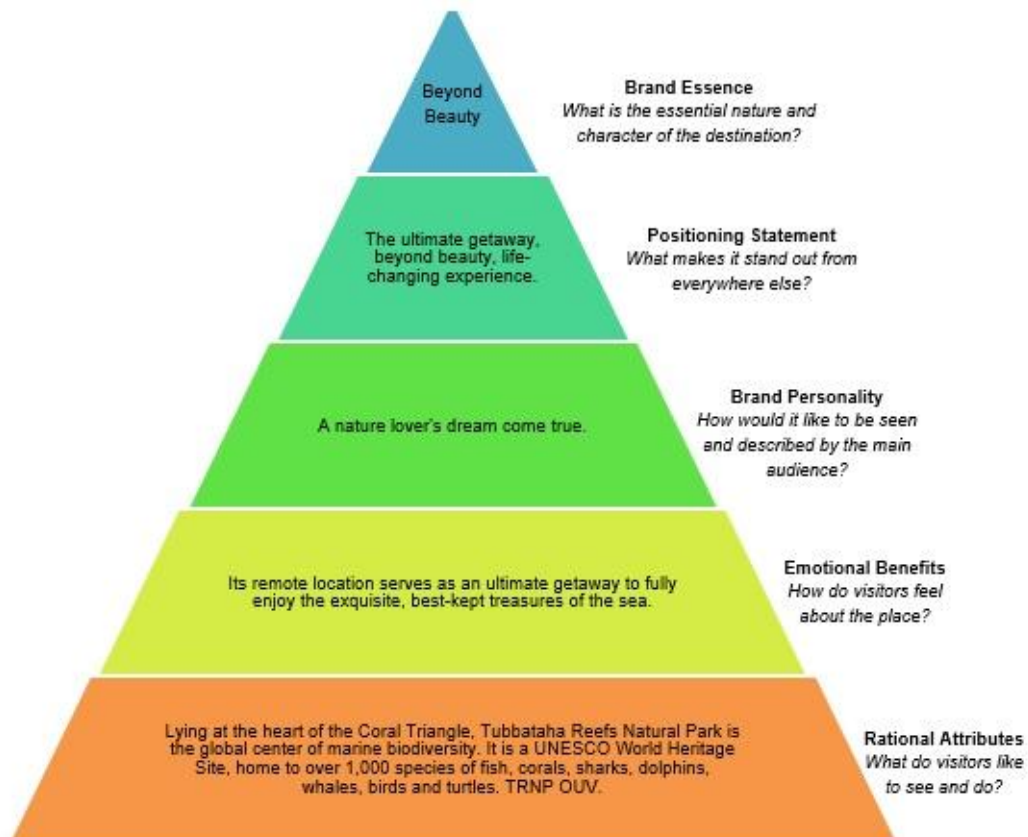


Figure 20. Market focus of Tubbataha Reefs Natural Park. Source: UNWTO Handbook on Destination Branding

Promoting the TRNP

Promotional Theme

The themes that need to be emphasized in promotion could be the OUV and encouragement to visit the TRNP. The promotion should be responsible in terms of content and treatment that should increase respect for the natural and socio-cultural environments of the TRNP.

Promotional Strategy

Grounded on the values and position of Tubbataha, the following promotional strategies shall be implemented:

- Social Media – Friends of Tubbataha Facebook page serves as the official Facebook site of TRNP. Social media presence has to be intensified, especially with a significant number of tourists get their information of the Philippines through the Internet.
- Website – contemporary design, dynamic not static, mobile device to cater to the serviced demographics. A website developer and online marketers may be tapped to evaluate and create a better site.
- Online Newsletter– Instead of the news blog, a monthly publication could be sent through direct emails to tourists and to any subscribers. It shall be available for subscription through the official TRNP website.
- Familiarization Tours –These tours shall be targeted to tour operators free-of-charge or at minimal cost.
- Promotional Trips—These tours will be geared towards television and print media practitioners with the intention of resulting in the development and broadcast of features on TRNP. An assessment shall be conducted to determine the best media partners for TRNP to ensure that messages about Tubbataha and conservation are accurately conveyed.
- Trade fairs—TRNP should always be well presented in participation of local especially in international trade fairs and exhibits through partnerships with promotional bodies and tour operators present in these events. Consistent presence in the focus markets is required in order to achieve growth and stability.
- Collaterals – These include brochures and other merchandise that can be distributed in trade fairs, visitor centers, and partner establishments.
- Promotional video – These will show activities visitors can enjoy in Tubbataha.
- Online virality targets – Social networks such as Facebook, twitter and, Instagram shall be used to increase visibility of the TRNP online. Infographics about the parks and its resources shall be created as well as a video graphic. A hash tag like #visittubbatha or #ilovetubbataha shall be employed.

Promotional Networking

Aside from TMO and its direct marketing activities, three distribution channels will aid Tubbataha’s promotions. Due to the lack of manpower of TMO to carry out all the marketing and promotional strategies, delineating them to these identified stakeholders will allow full implementation of the plan. The whole tourism supply chain and distribution network can be utilized to generate awareness and increase the public’s interest to visit the park (Fig. 21). For example, boat and tour operators could be tapped to circulate information about the TRNP through their marketing and advertising initiatives. Since dive outfits are the primary marketers of the TRNP, it would be logical to tap these outlets for any promotions. The TMO can provide information such as data and in-house photos for use in advertising campaigns.

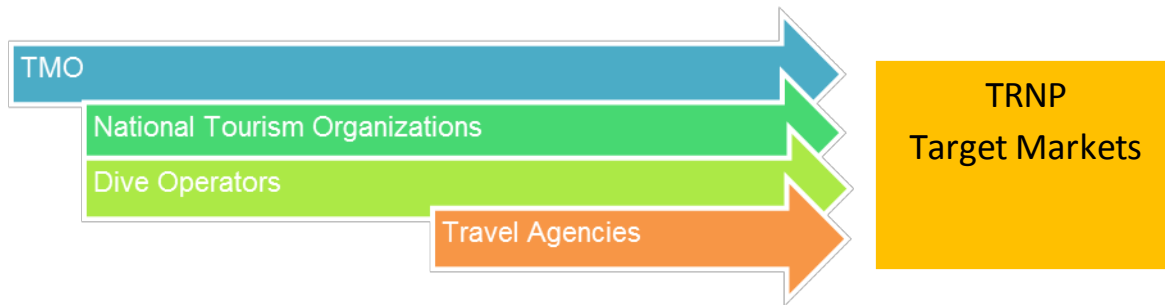


Figure 21. Distribution Framework for TRNP Tourism Promotions.

The TMO shall be responsible for conducting direct marketing activities through social media and its online presence. Partnership with National Tourism Organizations will be strengthened and the Department of Tourism urged to continually market Tubbataha internationally. TMO will disseminate its marketing strategies to dive operators in Tubbataha and encourage dive operators to align their strategies with the strategies implemented in this plan.

Participation in trade shows, such as the Philippine Travel Mart, as well as in international dive and water sports trade shows such as the ADEX in Singapore, Boot in Germany, Dive Birmingham in the UK, DEMA show in the USA, and DMEX in the UAE needs to be considered to increase the visibility of TRNP.

Appendices

Appendix 1. TRNP's Outstanding Universal Value

Brief Synthesis

Tubbataha Reefs Natural Park lies in a unique position in the center of the Sulu Sea, and includes the Tubbataha and Jessie Beazley Reefs. It protects an area of almost 100,000 hectares of high quality marine habitats containing three atolls and a large area of deep sea. The property is home to a great diversity of marine life. Whales, dolphins, sharks, turtles and Napoleon wrasse are amongst the key species found here. The reef ecosystems support over 350 species of coral and almost 500 species of fish. The reserve also protects one of the few remaining colonies of breeding seabirds in the region.

Criterion (vii): Tubbataha Reefs Natural Park contains excellent examples of pristine reefs with a high diversity of marine life. The property includes extensive reef flats and perpendicular walls reaching over 100m depth, as well as large areas of deep sea. The remote and undisturbed character of the property and the continued presence of large marine fauna such as tiger sharks, cetaceans and turtles, and big schools of pelagic fishes such as barracuda and trevallies add to the aesthetic qualities of the property.

Criterion (ix): Tubbataha Reefs Natural Park lies in a unique position in the middle of the Sulu Sea and is one of the Philippines' oldest ecosystems. It plays a key role in the process of reproduction, dispersal and colonization by marine organisms in the whole Sulu Sea system, and helps support fisheries outside its boundaries. The property is a natural laboratory for the study of ecological and biological processes, displaying the ongoing process of coral reef formation, and supporting a large number of marine species dependent on reef ecosystems. The presence of top predator species, such as tiger and hammerhead sharks, are indicators of the ecological balance of the property. The property also offers a demonstration site to study the responses of a natural reef system in relation to the impacts of climate change.

Criterion (x): Tubbataha Reefs Natural Park provides an important habitat for internationally threatened and endangered marine species. The property is located within the Coral Triangle, a global focus for coral biological diversity. The reefs of the property support 374 species of corals, almost 90% of all coral species in the Philippines. The reefs and seas of the property also support eleven species of cetaceans, eleven species of sharks, and an estimated 479 species of fish, including the iconic and threatened Napoleon wrasse. The property supports the highest population densities known in the world for white tip reef sharks. Pelagic species such as jacks, tuna, barracuda, manta rays, whale sharks and different species of sharks also are common here and the property is a very important nesting, resting and juvenile development area for two species of endangered marine turtles: green turtles and hawksbill turtles. There are seven breeding species of seabirds and Bird Islet and South Islet are breeding grounds to seven resident and endangered breeding species of seabirds. The critically endangered Christmas Island Frigate bird is a regular visitor to the property.

Integrity

The property comprises two atolls (North and South Atoll) and an emergent coral cay, Jessie Beazley Reef. It includes open sea with an average depth of 750 m and still displays a well preserved marine ecosystem with top predators, and a large number and diversity of coral reef and pelagic species. The property also hosts an important population of resident, nesting and feeding seabirds. The area is free of human habitation and activities and is of a sufficient size to maintain associated biological

and ecological processes. The property is of an adequate size to ensure the complete representation of the key features and processes of the reef systems within it, although the maintenance of these values also requires measures to be taken outside the boundaries of the property in relation to some migratory species and the buffering of the property from threats to the marine environment that could occur in the wider area. A key aspect of the integrity of the property is the low level of fishing pressure, due to the no-take policies which are in place throughout its area.

Management and protection requirements

Tubbataha Reefs Natural Park is legally protected through national protected areas legislation and a range of other environmental legislation which enable action to be taken against a wide range of threats. The implementation of the legislation is assisted by clear delegation to the management authority for the property. This is a remote property and its management is therefore a significant logistical challenge, requiring a well-equipped team with operational boats, well trained and well equipped staff and a sufficient operating budget for fuel, maintenance and accommodation to ensure a strong and responsive presence on the water. Tourism visitation requires careful planning and management to ensure the values of the property are maintained, and to respect the capacity of the property, as well as visitor safety and to ensure income is returned to both site management and local communities. There are threats to the property from shipping, marine litter, fishing, marine pollution and oil exploration. Thus effective buffer zone arrangements are needed, and internationally supported legislation to protect the property from shipping threats, and greater enforcement of marine litter regulation on the High Seas by the appropriate international organizations would be a significant benefit to the property.

Appendix 2. TMO Tourism Action Planning Workshop Output

Tourism Goal: To manage tourism to support conservation

YEAR	STRATEGY	ACTIVITY	OUTPUT	REQUIRED RESOURCES (Pesos)	INSTITUTIONS TO BE TAPPED
Objective 1: To increase revenues to cover a larger percentage of management cost					
2014	Diversity tourism activities	Conduct product and market development research	identified products, e.g., sailing, snorkeling, bird watching	150k	GIZ, DOT, UP-AIT, PSU
		Introduce product to operators, e.g., familiarization tours	Turn-over to operations	300K	Operations, DOT
2015	Use branding	Register Tubbataha trademark	Tubbataha	100k	
		Produce merchandise and develop distribution channels	increased revenues from merchandise sales	400k	Madkahuna, Bench, Nautica
		Develop a tag line	Tag line	100k	DOT, TBWA, PR Agency
2015	Increase Conservation fees	Conduct willingness-to-pay survey (KII)	New rates determined as well as a graduated fee system for the different activities	50k	WWF-Phil, TMO
		Adopt new rates	Increased in revenues	-	TMO
2015	Increase number of dive operators	Conduct investment campaign with PCSSD-DOT	increased number of boats operating in TRNP	50k	PCSSD-DOT

Objective 2: To increase appreciation of TRNP as a destination and conservation area					
2014	Effectively communicate the tourism and conservation msg.	Translate into materials into 6 languages, etc.	Produced info materials in 6 languages	100k	
		Translate OUV into popular forms	5-min AVP for tourist, motion graphics of OUV	200k	Media partners
		Update social media and increase visibility online	Increases number of likes in FB, website kept updated and dynamic	-	
		Participate in tourism related events (e.g. Tourism Week, Travel Mart, etc.)	Participated in at least one event annually	50k	City and Prov. Tourism Office, ATTOP
2014	Involvement in management	Publish opportunities for tourists to support management	Opportunities published in website	-	Operators
		Officially engage tourists	Contracts	-	
		Recognize tourist contributions	Contributions published, certificates and incentives provided	10k	

Objective 3: To encourage voluntary compliance to regulations					
2013	Collaborate with operators in rule making	Conduct annually dive operators consultation	Dive operators consultation held yearly	30k	Operators
		Involve tourism sector in planning	As needed	-	
	Disseminate park rules to divers	Conduct pre-departure briefings			
2014	Educate dive masters in environmentally ethical practice	Develop and implement accreditation mechanism for dive masters	Module for dive masters accreditation	150k	DOT (?)
			Conducted dive masters accreditations	50k	
2014	Monitor compliance	Identify ways to monitor compliance	Compliance monitoring mechanism identified	50k	GBR

Objective 4: To assist private and government sectors in promotion and marketing					
2014	Provide technical assistance	Sharing of data, in house photos, video footages	AVP, brochures, flyers, etc.	-	TMO, DOT, LGU-Tourism Office
2014-2015	Increase Tubbataha visibility	Close coordination with DOT, dive operators and media	Inclusion in DOT, dive operators, travel agencies website, alexa.com	50k	DOT, DO, Travel Agencies
2014	Engage yacht club, tour agencies, other maritime players in promoting TRNP	Identify potential new partners in promoting and marketing	New partners identified, directory of promotions partners	50k	LGU-Tourism Office

Objective 5: To provide high quality tourist experience					
2013	Maintain OUV	Implement management plan		-	
2014	Assess visitor satisfaction	Gather feedback from tourists -Exit survey	Compile tourist assessment of their experience	20k	
		Design exit survey	Exit survey form	20k	UP-AIT
2014	Enhance tourism infrastructure	Regularly maintain buoys	Well maintained mooring buoys	100k	TMO
		Provide mooring buoys for chase boats	At least mooring buoys installed	300k	TMO
2014	Secure medical support services and facilities	MOA/ agreements with PCG, local hospitals, LGU to respond to medical emergencies in TRNP	MOA	-	PCG, local hospitals, LGU
2014	Increase security of Tourist	Provide security to tourists and dive operators in TRNP	Increase number of rangers and visibility of security forces during dive season	-	
2014	Ensure presence of environmentally ethical DMs	Develop qualifying eco-ethical standards for DM <ul style="list-style-type: none"> Qualifying standard module developed and approved Conduct accreditation trainings 	Certified environmentally ethical DMs	150k	PADI, dive certification bodies, Philippine Commission on Sport Scuba Diving
		Assist in the organization and professionalization of local DMs	Organized local DMs association	-	Local DMs
		Identify existing local DM groups	Directory of local eco ethical DMs	-	

2014	Ensure compliance to regulatory navigational and ecofriendly standards`	<ul style="list-style-type: none"> • Coordinate with gov't agencies, MARINA & PCG, to strictly impose requirements for issuance of permits • Research international standards and adopt for TRNP • Promote agreements on standards with other MPAs/ dive sites, e.g., Apo reef 	TMO high standard accreditation	-	MARINA & PCG, other MPAs
2014	Maintain harmonious relationship with stakeholders, i.e. DO, DMs, boat crew	Increase participation of stakeholders in the management of the park	Increase voluntary compliance (Increased sense of ownership)	-	TMO, DO, DMs

Objective 6: To encourage tourism stakeholders in research

2014	Mentorship program	Established Partnerships with academe	Program module, peer, reviewed research paper, generated tourism data	-	WWF, Academe
2014	Increase participation of divers, operators in data collection	Create incentive scheme for stakeholders	Incentive scheme developed, increased data collection	100k	UP-AIT
		Streamline sighting forms	-Indicator species (environmental condition) identified -User-friendly sighting forms -increased return of sighting forms	100k	UP MSI

Objective 7: To encourage tourism research

2015	Conduct research	Tourist impact	Research output	800k	UP-AIT DOT
		Carrying capacity/LAC			
		Economic impact/value chain			
		Ecological changes happening in TRNP			
		Feasibility studies for new products and merchandize			
		Dive site preferences and usage			
		Tourist behavior studies			

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