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To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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WWF TUN MUSTAPHA PARK THE CREATION OF A MARINE PROTECTED AREA: A CASE STUDY ON MALAYSIA

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CASE
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2017



**TUN MUSTAPHA PARK
THE CREATION OF A
MARINE PROTECTED AREA
A CASE STUDY ON MALAYSIA**



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INTRODUCTION

When the Sabah State Government declared the gazettment of the Tun Mustapha Park (TMP) on May 19, 2016, it earned universal praise for its commitment to international marine conservation.

It also marked the completion of more than 13 years of negotiation, lobbying, capacity building, scientific discovery and community outreach by a range of government, non-government agencies and international supporters.

TMP is located on the northern part of the Malaysian state of Sabah. It covers a marine area of almost 900,000 ha, making it the largest marine park in Malaysia. A hugely important area for conservation, it is one of the major conservation areas of the Sulu Sulawesi Marine Ecoregion (SSME) and a priority seascape within the Coral Triangle – which is itself acknowledged as the centre of the world’s marine biodiversity.

TMP is particularly significant due to its unique location separating the South China Sea from the Sulu Sea by the narrow Balabac strait, a stretch of water critical for the distribution of coral larvae, marine organisms, and migratory animals, such as whales and dolphins.

Indeed, the TMP has immensely rich marine biodiversity with more than 250 species of hard corals, around 430 species of fish, endangered green turtles and dugongs, as well as significant primary rainforest, mangroves, and sea grass beds.

The area’s socio-economic importance cannot be overstated either, with more than 85,000 coastal dwellers supported by its fishing grounds, which collectively produce around 100 tonnes of fish per day, with an estimated landed value of US\$200,000.



Despite its rich biodiversity, the TMP is seriously threatened by overfishing, destructive fishing practices and pollution. The Park’s gazettment may be the life-line it desperately needs to address the ever-growing and unsustainable pressures on its marine ecosystem.



This case study outlines the genesis of the marine park initiative, its challenges and champions, key developments, and lessons learned along the way to the ultimate formation of what will surely become a national and globally significant marine park.



DEVELOPING A ZONING PLAN FOR TMP

The zoning plan for the TMP was developed by the Zoning Working Group of the TMP ISC, based on the concept of different zones identified for different purposes. Setting criteria for selection of the different zones was important to ensure each biodiversity feature and proposed use was adequately represented.

Several follow-up ‘criteria’ workshops were conducted between 2007 and 2012 to identify various zones within the proposed TMP and this information was overlaid with on-going data gathering, including habitat mapping, fisheries surveys, and ecological surveys.

SYSTEMATIC CONSERVATION PLANNING

A systematic conservation planning tool, ‘Marxan with Zones’ was selected as a repeatable, transparent and scientifically credible method to develop a potential zoning plan for TMP.

The program is well accepted and has been used in a number of marine planning environments including the Great Barrier Reef in Australia.

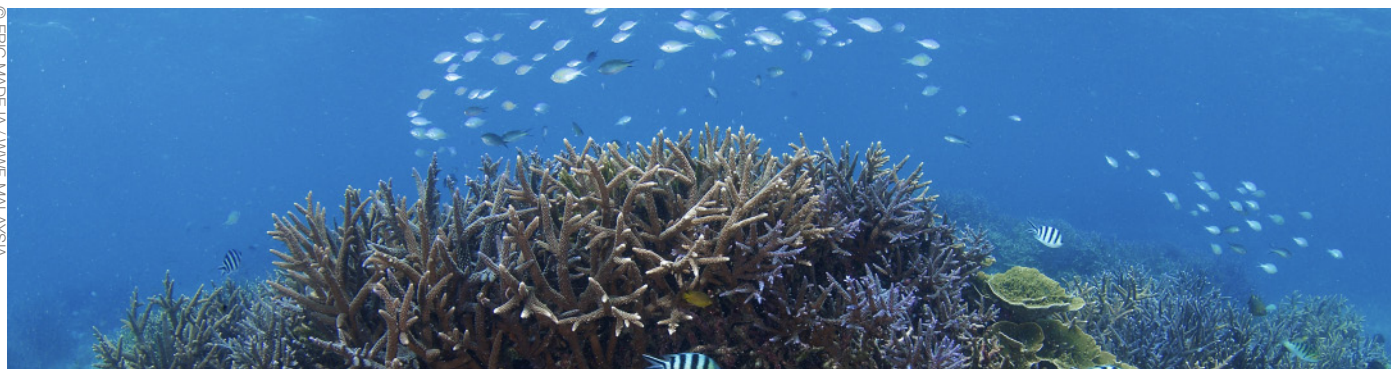
Two main types of data were collected from scientific surveys and local knowledge and used in the planning process:

1. Conservation features, including habitat and species data;
2. Cost features, including the location of villages and fishing grounds.

Other factors considered included:

- Specific treatment for commercial fishing areas;
- The zones could only extend three nautical miles from the mainland and two nautical miles from islands;
- The zones had to accommodate an existing fisheries reserve in Marudu Bay;
- Protection of a high concentration of coral reef habitats.

A large number of TMP communities depend on fisheries for their subsistence and small-scale livelihood preservation. Impacts on the fishing community were minimized through maintenance of access to fishing grounds and inclusion of as many fishing grounds close to the fishing communities in either Community Managed, or Multi-use zones.



The designing of the zoning plan was undertaken in three stages, Stage 1 was a prioritisation using Marxan with zones, Stage 2 was an enforceability revision by Sabah Parks, and Stage 3 was the stakeholder consultation.

A final scenario, targeting 30% of key habitats in the fully protected area and 70% of traditional fishing grounds remaining accessible, was selected at the planning stage of the drafting of the zoning plan for TMP. These were the targets used during the conservation planning using Marxan with Zone.

During the prioritisation stage, a target of 30% for allocation as a preservation zone for conservation was set as a minimum to ensure sustainability, based on a review of the literature and the condition of surviving biodiversity. This left a balance of 70% for small scale fishermen's fishing grounds.

The following conservation targets were incorporated into the zoning plan:

- At least 30% of each habitat and special features in each ecological region should be represented in the preservation zone:
 - o Coral reefs;
 - o Sea grass;
 - o Mangroves;
 - o Special features: Balambangan limestone caves, turtle nesting and feeding areas, and dugong habitat.

- At least 70% of small-scale fishermen's fishing grounds (within 3 nautical miles from the shore) should be covered in either Community Managed or Multi-use zones to ensure that traditional and non-destructive fishing practices could be continued.

Based on this prioritisation, the best scenario was reviewed by Sabah Parks for enforceability purposes. Where necessary, similar zoning areas were aggregated into polygonal shapes to make it is easier to enforce at a later stage. This stage successfully maintained the percentage of critical habitat in the preservation zones and fishing ground accessible to fishermen.

The revised zoning plan was taken to the stakeholders for their input in the final stage. This third stage resulted in a reduction in the key habitat, from 30% to 20%, with mangroves failing to gain representation in the plan.

A key success during the zoning process was the protection of key habitat while maintaining at least 70% of small-scale fishermen's fishing grounds (within 3 nautical miles from the shore). This allows for the achievement of TMP's objective to ensure sustainable resource development and protection of biodiversity through its zoning system.

THE FINAL ZONING CHOICE

Based on the conservation objectives of sustainable use of resources and protection of biodiversity, the 'Marxan with Zones' program identified four different priority zones:

1. **Preservation zone** - where all extractive activities are prohibited;
2. **Community managed zone** - where non-destructive small scale and traditional fishing activities are allowed;
3. **Multiple use zone** - where non-destructive and small-scale fishing activities and other sustainable development activities, including tourism are allowed;
4. **Commercial fishing zone** - where all fishing activities are allowed.

According to Rebecca Jumin, Head of Marine Programme, WWF-Malaysia, designing the optimum zoning plan depended on gaining enough 'local knowledge' to decide the right balance between the scientifically based requirements for adequate environmental protection and community livelihood needs.

"We felt that local knowledge was as important as scientific and empirical information in this respect. The main concern of the island people, who are mostly fishermen, was the preservation of their fishing grounds. During the zoning process we went to great lengths to explain that some areas needed to be zoned as 'no-take' areas, in order to preserve fish stock for the long term benefit of the fishermen themselves. In the end I think they got to understand that." - Rebecca Jumin

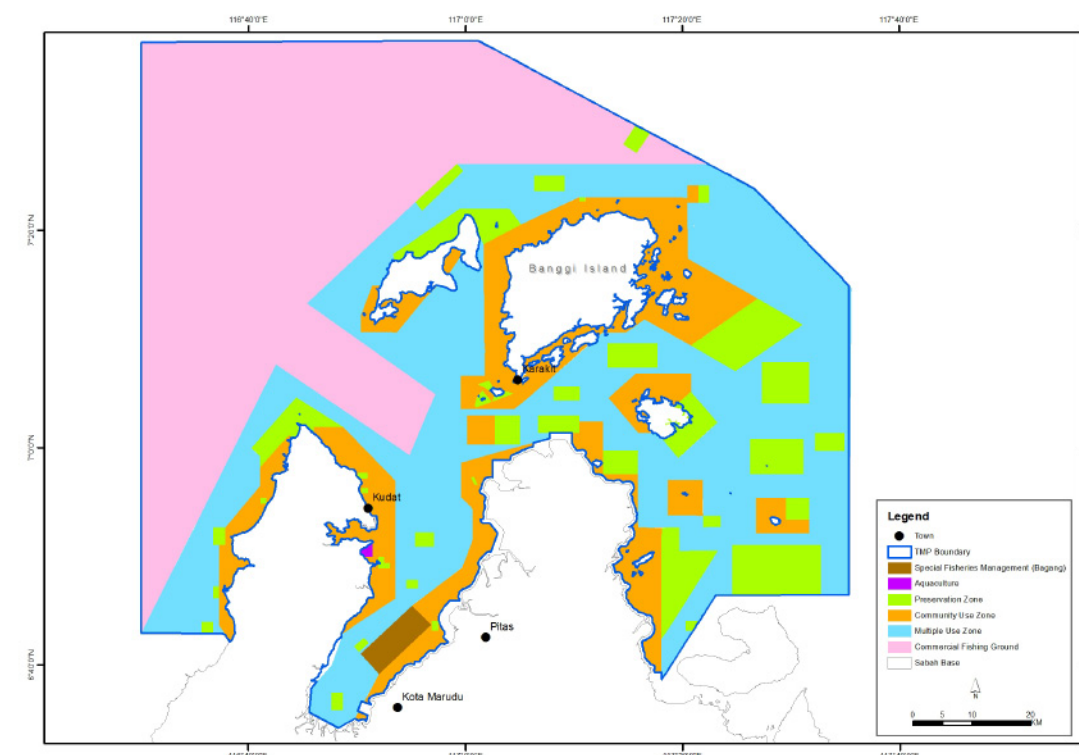


Fig 4 – TMP was divided into 4 different ecological regions on the basis of potential ecological influence of sea currents and wind movements to the development of coral reef ecosystem.

FISHERIES MANAGEMENT

With the zoning plan determined, an important component of its practical implementation was ensuring fishery management issues were addressed.

Fisheries in TMP are characterised in three main ways:

1. Traditional fisheries (small scale fisheries using hook & line, driftnet, and traps);
2. Fishing activities carried out less than 3 nautical miles from the mainland; and
3. Commercial fisheries.

Two dominant commercial fishing ‘gears’ are used in TMP; the trawl net and the purse seine net, which is a large net drawn into the shape of a bag and used for catching shoal fish.

Challenges to the sustainable management of fisheries included, trawling in vulnerable reef areas, overfishing, and use of destructive (and illegal) fishing methods. In addition, encroachment by commercial fishing vessels into traditional fishing areas and the use of excessive lights on purse seiners (which attract excess, and often juvenile fish), were also leading to overfishing. The result was declining fish stocks and habitat degradation which threatened the very survival of fisheries, including high value fish species such as the humphead wrasse.

Through what was termed the ‘Ecosystem-Approach to Fisheries Management (EAFM)’, the promotion of sustainable fishing was achieved by addressing issues such as the status of the resource, the health of the marine environment, and post-harvest technology and trade. Engagement with commercial fishers began in 2006 with a series of workshops leading to the clarification of existing fishing zones and regulation.

One of the biggest obstacles was actually securing participation from the commercial fishery sector. There was a perceived lack of incentive for the industry to support actions contributing to sustainable fishery management in TMP. The only way to overcome this lack of support was to engage in constant consultation, outlining the current poor state of the resource and the ramifications of a business as usual approach.



The need to “engage, engage, and then engage some more” with industry, was highlighted by Lawrence Kissol, Head of Marine Resource Management, Department of Fisheries, Sabah.

“These continuous and lengthy consultations were pivotal in achieving agreement among commercial industry stakeholders with respect to the zoning and management plans for TMP. This is a vital process that needs to continue beyond this stage to ensure successful implementation of the management and zoning plan,” he said.

GPS data collected by trained fisheries observers between October 2011 and March 2012, allowed for the sampled catch to be matched with a spatial location. This provided valuable information on practices prevailing at the time by commercial trawl and purse seine fishers within the park.

The resulting report: Fisheries Assessment for Feasibility of Spatial Management of Two Gears in TMP; contributed towards the spatial zoning process for TMP and enhanced the understanding of fishing patterns within the East Coast Fishing Zone in Sabah.

The study recommended a number of important regulations be introduced:

- The inclusion of no-fishing zones and restrictions on the type of fishing gears allowed to be used in specified zones;
- Permission for only Kudat-registered commercial fleets to fish within TMP;
- Landings to be made compulsory in Kudat fish landing ports, and a limit on the number of fishing licenses within TMP.



ECONOMIC EVALUATION OF THE TMP

Economic concerns are a feature of any proposed creation of a new marine protected area. Local communities can be concerned as to how the new legislative standing will affect their livelihoods and traditional use of the area. Business interests, especially in the extractive industries, are fearful of being locked out of areas, and governments are equally concerned that future resource utilization may be affected by these decisions.

In response to this, in March 2011, WWF-Malaysia commissioned an economic evaluation of the TMP to assess the cost and benefits of current development proposals including limestone/sand/silica mining and oil extraction off the west coast of Sabah.

The methodology for this study was the Total Economic Value (TEV) approach - a standard methodology that classifies the

ecosystem goods and services according to how they are used; and the Cost Benefit Analysis (CBA) method to evaluate the economic feasibility of various projects in the study area by comparing the proposed project with its alternatives.

The study found that though much of the area's natural beauty and ecosystems were diminished, they were still intact, so there was still a tremendous opportunity to 'choose' the best path of sustainable development for the proposed park.

The total economic values for three scenarios over a period of 25 years were derived from the study as:

A: TMP with no proposed extractive projects – RM 1.47 billion

B: TMP with proposed extractive projects – RM 1.56 billion

C: TMP with no proposed extractive projects but with ecotourism – RM 1.81 billion

The study concluded that economically it was better to conserve and protect the proposed TMP through ecotourism than to proceed with mining projects. While economically, biodiversity conservation made sense, it was also recognized that conservation alone would not resolve issues of socio-economic development. Hence, job creation and resettlement of island populations to the districts of Kudat, Kota Marudu and Pitas where plans for agriculture are ongoing was also seen as a priority for development.

This way, the smaller and ecologically sensitive islands could retain their pristine beauty for the benefit of ecotourism and biodiversity conservation while sustainable development on the larger islands fulfilled goals of development and poverty eradication.

SCIENTIFIC SURVEY - THE TUN MUSTAPHA PARK EXPEDITION

In September 2012, a team of marine scientists from Malaysia, the Netherlands and Australia undertook the Tun Mustapha Park Expedition (TMPE) to assess marine biodiversity and ecology of the area.

In addition, the expedition planned to survey socio-economic aspects of the local communities and raise awareness of TMP and the benefits of protecting and managing the marine ecosystem.

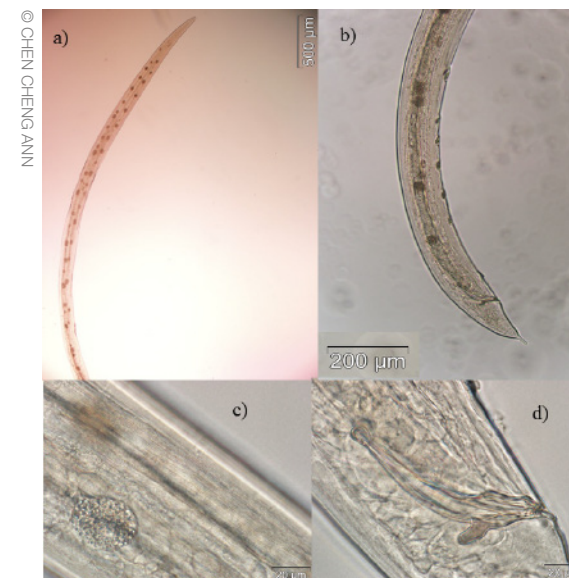
The survey yielded a vast amount of scientific and related information including the discovery of two new species - a coral-inhabiting gall crab and new marine roundworm - with the potential for many more to be discovered with more research opportunities.



New species of gall crab

The research done on this gall crab was published in the 500th issue of ZooKeys.

L. semperi (C-male): The male gall crab.



New species of marine roundworm

Diving 15 metres deep, researchers collected both male and female samples of this new species, *Pseudoplatycoma malaysianis* from a sandy sub-tidal area of the seabed.

Photos: *P. malaysianis*: a) Lateral view of a male anterior body region. b) Lateral view of a male posterior body region c) Ocelli-like pigment spots. d) Male copulatory apparatus

SURVEY CONCLUSIONS

The expedition was a great success, but it highlighted and scientifically verified numerous threats to TMP's future survival. Fish bombing and cyanide fishing were destroying the coral reefs. The loss of mangrove forests due to land clearing and coastal development was affecting fish breeding and nursery grounds.

Overfishing due to overcapacity and unsustainable fishing practices had led to a decreasing fish catch. These practices included the use of small mesh size in fishing nets, use of non-selective gears (e.g. trawlers) and encroachment of larger trawlers and purse seiners into the traditional fishing zones.

Aquaculture was being practiced in a totally unsustainable manner with sea cucumber and crab farming still dependent on wild stock for their juveniles. Much of this information was known anecdotally by locals. Indeed, the fishing communities had first-hand experience of decreasing fish catches, but in developing the management plan for the park, it was critically important to now have this information verified and documented by rigorous, credible and scientifically based analysis.





PUBLIC AWARENESS SURVEY

Whilst the technical process and scientific assessment of the value of the TMP was on-going, WWF - Malaysia also carried out a public survey to assess awareness of the proposed TMP and issues of concern with its development. This would also form the basis of a strategic communication and engagement plan for stakeholders and supporters.

With a sample size of 300, the survey was carried out in three locations: Sandakan, Kudat, and the Sabah state capital of Kota Kinabalu. Respondents were chosen from the government, public and private sectors and a range of levels from management, office bearers, and decision and non-decision makers.

The survey found that 47% of respondents were aware of the proposed TMP with the highest level of awareness in Kudat. Amongst the survey groups, those in the fisheries, government, tourism, NGO, and local authority sectors were most aware of TMP.

Access to clean water was a main concern for communities in TMP, as well as lack of formal education, sanitation, availability of electricity and security. Most viewed that fish populations and quality at market were declining.

Fish bombing, overfishing, mangrove and habitat destruction, illegal hunting and collection of turtle eggs were perceived as the main threats to fishing areas. These, and other threats mentioned generally related to lack of enforcement by relevant authorities and so not surprisingly, current management of marine resources in the proposed TMP was perceived to be insufficient. A collaborative management approach for the marine resources amongst government agencies, NGOs, and villagers was preferred by most respondents in Kudat.

The vast majority of respondents (85%) believed the gazettement of TMP would have a positive impact on nearby communities in terms of job creation, a cleaner environment and increased fish numbers. Tourism and fisheries were the two sectors thought to be most likely to benefit economically from the gazettement of TMP, though loss of land ownership, loss of fishing grounds and decreased income were a concern for some respondents, due to proposed declaration of non-fishing areas

within the TMP. These were important factors to be considered in the future management strategies for the park.

CONCLUSIONS AND RECOMMENDATIONS

The survey results yielded valuable information which led to a number of recommendations to support the establishment of the TMP.

Conservation outreach, education and fostering networks: To encourage conservation education and networking activities in Sabah through a range of agents, making it more relatable and interactive for local communities. To use a full variety of communications channels – newspapers, radio, social media and advertising to improve the information, update progress and seek feedback on TMP issues and developments.

Alternative livelihood development programs: To develop potential alternative livelihood activities, such as the production of handicrafts made by TMP communities.

More transparent regulation and stricter enforcement: To address ambiguity in fishing and conservation regulations, and ensure enforcement with independent auditing.

The results of this study and the recommendations emerging from it, formed an important ‘touchstone’ for the development of campaign activities to mobilize support for TMP gazettement as well as livelihood development programs.

LIVELIHOOD DEVELOPMENT

FROM FISHERS TO WEAVERS

The women of Maliangin and Banggi islands off the northern coast of Sabah, had a long tradition of weaving with the leaves of the pandanus palm, but the skills required to harvest, prepare, dye, and weave the leaves were vanishing.

With the fisheries declining and food security threatened, household budgets were being pinched and the women needed to help make ends meet. When WWF-Malaysia, through USAID's Coral Triangle Support Partnership (CTSP) came to the area to promote alternative livelihoods to supplement local income, they found receptive ears. Together they planned to revive and adapt a weaving program that would enable the village women to earn extra income for household needs, reducing their dependence on income from fish.

KUDAT TURTLE CONSERVATION

Kudat Turtle Conservation Society (KTCS) initially focused on awareness activities such as beach clean-up and waste management to raise awareness on the impact of solid waste (e.g. plastic) on turtles. The group is now working with other local groups on mainland Kudat to conduct beach patrolling and protection of turtle eggs through development of a hatchery. The group also works with resort operators at Sempang Mengayau, a well-known tourist destination in Kudat, to promote turtle friendly practices.



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WWF brought in a weaving expert from peninsular Malaysia to teach interested women. The women knew the basics of weaving necessary to make sitting and sleeping mats, but they needed help creating designs for marketable items. At a series of three training sessions held in Karakit, the area's main town, they learned to make baskets, file folders, placemats, bracelets, and other small items to supplement the mats. They also learned what color combinations and patterns might be appealing to the tourist and urban markets.

Nafsah Indami, from Maliangin Island, beams when talking about the income earned by her family since 2010. She specializes in woven bracelets and bangles and estimates she has earned RM 500 (about US\$170) in the

past year. She can make five items a day between her other obligations and can sell these for RM 5 (US\$1.70) each, in line with the national minimum wage.

"I've used the money for fixing up the house, for house-keeping and food. I got a phone too," she said, with a broad smile and a laugh.

The women are now recycling plastic bottles by cutting them into circlets around which they weave broader bracelets. They sell their products to eco-tourists visiting the area and hope to sell more items to stores in the cities.

The weavers in Banggi Island got a contract to weave 1,200 napkin rings for the Shangri-la Tanjung Aru resort in Kota Kinabalu, Sabah's capital city. The resort is also interested in selling other pandanus products such as placemats and coasters in its shops. Skills have increased and an initial market for the products is now established, laying a solid foundation for a profitable future for the women.

ISLAND YOUTH CLUB MONITORS AND TRAINS FOR CONSERVATION

The young people of Banggi Island, in the TMP are taking responsibility for their own futures by dedicating themselves to environmental issues affecting their communities. Their work began before 2006, but their efforts gained momentum in 2009 when support from WWF-Malaysia and the CTSP enabled them to officially register as the Banggi Youth Club (BYC) and therefore establish and fund programs.

Since then, the group has grown into a vibrant 150-strong force for good on the island, conducting a broad range of activities such as community education, reef monitoring, beach clean-ups, alternative livelihood projects, and school presentations.

Under their Green Lifestyles project, they have developed five educational modules—anti-plastics, anti-fish bombing, mangrove reforestation, composting, and recycling. On an annual basis they travel around Banggi, (population 20,000) and neighbouring islands, visiting primary and high schools and dozens of communities. The results of their efforts include a 25% reduction in use of

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FISHERIES OBSERVER PROGRAMME

Members of the Kudat Fishing Boat Owners Association (Persatuan Pemilik Kapal Nelayan Kudat, PPKNK) took part in the pilot Fisheries Observer Programme (FOP) from 2011-2012, which was implemented to collect data for the assessment of fisheries in TMP. In the Coral Triangle Initiative Regional Business Forum (CTI-RBF) 2011, PPKNK was recognised as a significant Public-Private Partnerships supporting conservation and management of the Coral Triangle.



plastic bags, a 40% increase in recycling, integration of their Green Lifestyles modules into the high school after-school curriculum, and a 'No Plastic Bag Friday' in Karakit, the main town on Banggi.

BYC also runs programs for young children using puppet shows, painting and drawing to get the conservation message across. Club members have also learned diving and reef monitoring skills and they set up monitoring transects in key marine areas to record changes in the fish, coral and substrate.

One young woman, Siti Noraidah, is particularly taken with the undersea world.

"I like diving," says Siti. "I like seeing the animals and the coral. I like recording everything. The sea is so different from the land, it's peaceful and calm down there."

There are many things about the work that club members like, such as gaining work experience, raising awareness, working with kids, learning to speak in public, teaching, traveling to other communities and sharing their knowledge with family and friends - but it is seeing the effect of the work that keeps them going.

"Our vision is to see all Banggi people living a green lifestyle," said Mohammed Yusuf, current leader of BYC.



TMP CAMPAIGN DEVELOPMENTS

Whilst progress was being made with advocacy and stakeholder engagement around TMP gazettement, the pace was still slow and the government's own original deadline of 2015 for gazettement was fast approaching. As a result, WWF-Malaysia decided that more effort was needed in the form of a 'campaign' to further raise awareness and urgency around the need to gazette the TMP to protect the globally valuable marine biodiversity present.

To this end, a 3-day campaign planning workshop was held in Kuala Lumpur in June 2014, with representatives of WWF International's marine program, including the WWF Coral Triangle Programme and WWF-Malaysia Marine program staff.

STRATEGIC KEY INITIATIVES

As a result of the workshop two pathways were developed.

The first was the more conventional communications and awareness activities involving community stakeholders, local media and social media activities. The second was high level advocacy with decision makers on the final push for the gazettement of TMP. This included recognizing Sabah State Government efforts through the WWF's Leaders for a Living Planet Award and showcasing TMP in international fora, such as the World Parks Conference.

World Parks Congress 2014

The World Parks Congress (WPC) is held by the IUCN every 10 years. This decade, Australia secured the honour of hosting the event and more than 6,000 participants from more than 170 countries met in Sydney on November 12-19, 2014.





Guests, speakers and participants at the CTI-CFF Celebrating Achievements in the Coral Triangle side event at WPC 2014.

The congress aim was to discuss, debate and disseminate information on the state of the world's protected natural areas.

The WPC was earmarked in WWF-Malaysia's strategy as a premier international event to show support for the Sabah State Government to gazette the TMP. Work towards this endeavour was rewarded with the Sabah State Government being honoured for its commitment in two separate side events at the WPC.

Celebrating achievements in the Coral Triangle

A high-level reception was hosted in collaboration with the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), the Australian Government, and other development partners. It attracted more than one hundred guests from a diverse range of organizations who came to be part of the celebration and to hear of the commitment from the

Australian Government to invest a further six million AUD for the CTI-CFF and the commitment from Malaysia to gazette Tun Mustapha Park, in the state of Sabah. Speaking at the event, Mundita Lim, Head of Secretariat of the Philippines' National CTI Coordinating Committee, congratulated the Malaysian federal and Sabah state governments for their commitment to gazetting the TMP and showcasing the progress of their efforts at the WPC.

“With the impending gazettement of Tun Mustapha Park, the Coral Triangle stands to gain yet another marine protected area, along with other flagship sites including the Wakatobi National Park in Indonesia and the Turtle Islands Wildlife Sanctuary and Tubbataha Reefs National Park in the Philippines.” - Mudita Lim

Durban to Sydney – a decade of conservation achievement

Hosted by WWF International and WWF-

Australia, and supported by WWF-Netherlands and WWF-US, this event was WWF's premier one for the Congress, with more than one hundred specially invited, high level guests, including the President of the Republic of Madagascar and WWF International's new Director General, Dr Marco Lambertini. The event profiled the progress on implementing the commitments made at the Durban WPC 10 years ago by the governments of Madagascar, Mozambique, and Senegal and profiled new Protected Area (PA) commitments, especially from Africa and the Asia-Pacific.

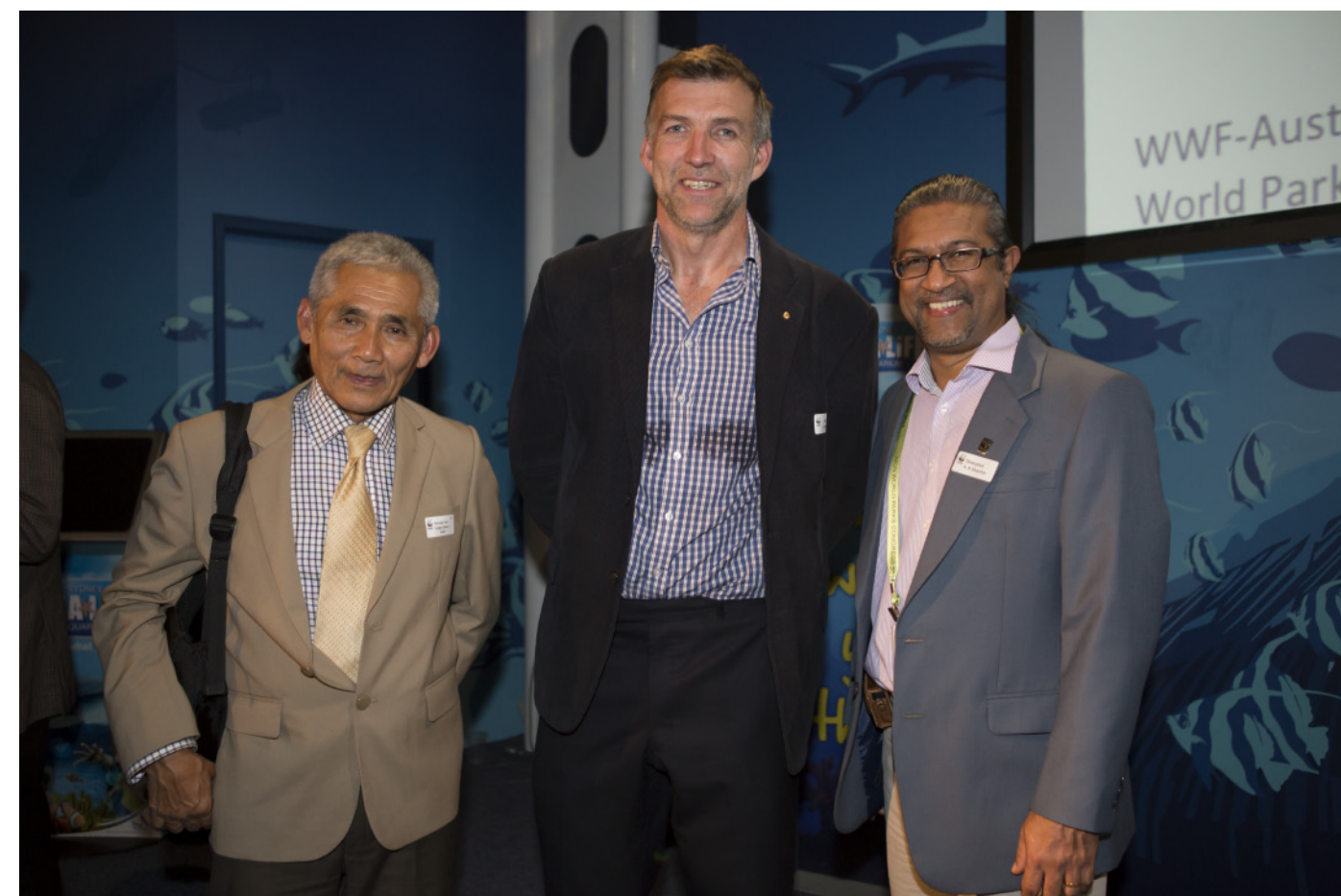
WWF facilitated the announcement of more than 140 million hectares of PAs achieved or committed – an area more than twice the size of France – and funding totaling more than US\$500 million for effective PA management.

Malaysia's magnificent contributions

YM Dato' Seri Tengku Zainal Adlin, Chairman of Sabah Parks, was especially invited to WWF's gala event to honour the state of Sabah and its leaders for its commitment to park conservation.

He said Sabah had a long history of marine protection, with the gazetting of the Turtle Islands Park, in 1977, the signing of the Sulu-Sulawesi Marine Ecoregion Conservation plan, along with Indonesia and the Philippines in 2004, and the gazetting of Malaysia's then largest MPA – the Tun Sakaran Marine Park, in 2004.

As a further commitment to protecting its marine resources, Tengku Adlin announced the government's intention, to gazette the Tun Mustapha Park.



YM Dato' Seri Tengku Zainal Adlin, Chairman of Sabah Parks was especially invited to the WWF gala event to honour the state and its leaders for its commitment to park conservation. Seen here with WWF Australia Ambassador Tim Jarvis and WWF Malaysia CEO Dionysius Sharma also at the event.

“Once gazetted, Tun Mustapha Park will be evidence of Malaysia’s commitment to the Coral Triangle Initiative and contribution towards meeting the Aichi Biodiversity Target of at least 10% marine areas protected and managed. We would like to thank all our supporters and look forward to your continued support for the effective management of the Tun Mustapha Park.”- YM Dato’ Seri Tengku Zainal Adlin.

WWF Leader for a Living Planet award presented to the Sabah State Government

As part of the TMP campaign strategy, WWF also intended to formally and internationally recognize the efforts of the Sabah Government by the presentation of its prestigious ‘Leader for a Living Planet’ award to Sabah’s Chief Minister, Datuk Seri Musa Haji Aman.

The award was originally to be presented at the World Parks Congress in Sydney, but was postponed to a ceremony in Sabah due to last minute changes to the Chief Minister’s schedule. During the event, WWF pledged full support to the Sabah state government for the designation of the park and to help secure the funding required to

ensure its effective management once created.

Speaking in support of the award, Director General of WWF International, Dr Marco Lambertini said:

“The gazettelement of Tun Mustapha Park is a globally significant action that will boost the conservation and biodiversity of this uniquely rich natural environment. It will also do much to ensure the sustainable management of the significant marine resources in the area, for the long-term benefit of the more than 85,000 people living on the coast and islands in the proposed park.”

“Effective management of the Tun Mustapha Park will help ensure the viability of the area’s fisheries resources – and high quality ecotourism can provide hugely increased value, based on this natural treasure. The gazettelement of this park should act as a model and an inspiration for marine conservation worldwide.”

Dr Lambertini also paid tribute to Dato’ Seri Tengku Zainal Adlin, Chairman of Sabah Parks, for the outstanding contribution his organisation has made in the long journey towards the TMP’s gazettelement.

LESSONS LEARNED

Any project of this length and scope is going to develop some effective strategies and others that turn out not to be effective as first hoped. The great opportunity for the future development of the TMP and for similar projects that follow, is to learn the valuable lessons along the way that a project of this magnitude reveals. These included:

Legislative issues with respect to gazettelement of the TMP

Whilst the TMP has been ‘declared’, there remain a number of nagging legislative issues yet to be resolved.

One of these is that establishment of the Tun Mustapha Park as a ‘multiple use’ park under IUCN (Category VI) marks a considerable shift away from normal practice in park management in Sabah. One which is not strictly covered by legislation. Parks in Sabah are established under the Sabah Parks Enactment 1984, and are mostly categorized under Category II of IUCN’s protected area categories as ‘no take areas’ except for recreational activities. The fact that an IUCN (Category VI) incorporates a large scale multiple use zoning system and a participatory and collaborative process, may be problematic for future park management.

In addition, it is believed that the ‘convening authority’ of TMP’s managing authority, Sabah Parks, is currently limited. This implies big challenges ahead for the implementation of a collaborative management approach for TMP. There are existing examples of multi-agency governance of natural areas in Sabah, such as the Darnum Valley Conservation Area, but these issues will need careful management if they are not to derail the implementation of an effective management plan for the TMP.

Financial resources

Adequate finance has proven to be a key ‘rate limiting’ step in the development of the TMP. Despite the ‘notion’ of the park being around since the early 2000s, the actual planning process was delayed until funding from the USAID CTSP (Coral Triangle Support Partnership) could be secured in 2010. This funding enabled a focused effort to push for the development of an Integrated Management Plan and designing of a zoning plan for TMP. With the gazettelement achieved, sustainable financial resources are still going to be critical to ensure successful implementation of TMP, to achieve its objectives.



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Stakeholder support and collaborative management

Community involvement is seen as a significant factor contributing to the success of an MPA and the TMP was living proof of this. The community engagement conducted throughout the planning process created a platform for the local communities to secure tangible benefits throughout the planning process. Likewise, it is critical to secure local community commitment to a final plan that is developed.

“You can have a great management plan based on the latest conservation and biodiversity measures, but if you can’t implement it because the local people don’t think it considers their needs and therefore don’t adhere to the rules - then it is practically useless and will fail to meet its objectives.” -- Rebecca Jumin.

Similarly, capacity building within the community is a vital tool in gaining this commitment. “Development of livelihood programmes in conjunction with the demonstration sites within TMP provide alternatives to stakeholders, especially the

local communities, to diversify their livelihood and source of income to move away from total dependence on fisheries.” -- Rebecca Jumin.

There is a continued opportunity for Sabah Parks and the governance body of TMP to engage the communities in ‘collaborative management’, especially in conjunction with the Community Managed Zone (also called Community Use Zone).

Fisheries management

When dealing with the vexed issues of fisheries management, discussion must be allowed to continue until a decision that is agreeable to all parties is achieved. This is far easier to say than do, but it is vital, especially when it comes to resolving the encroachment of larger fishing vessels into the three nautical mile traditional fishing zone and the declining resources observed for the trawl fishing gear. The on-going discussions may mean that some existing plans have to be revised, but the commercial fishing sector is an important part of the TMP environment and has to be productively managed.

Biodiversity conservation

It is important to realize that even though MPA may be gazetted, there must still be room for negotiation around certain zoning issues. For example with the TMP, not all targets were met in all planning stages. Most significantly, at the final stakeholder stage, target agreement was only able to be achieved for coral reefs and sea turtle in one region - Region 4. This, to some extent reflects the needs of stakeholders that prioritized access to fishing grounds and other uses for the area.

In looking for outcomes from the zoning plan, it is best not to let ‘perfect’ become the enemy of the ‘good’. But it is also recommended that the stakeholder planning process be revisited to ensure that biodiversity conservation targets are eventually met, as they are crucial for the overall regeneration and sustainability of the area.

Planning and designing process for TMP

Finally, lessons learnt from the TMP spatial planning with ‘Marxan with Zones’, will become increasingly important as an

‘ecosystem’ approach to resource management gains momentum in Malaysia and across the region.

Key issues in this planning process include:

- A legal framework behind the implementation of the planning process is needed to ensure commitment by and foster confidence from the stakeholders.
- A planning framework should be well established prior to the zoning process, including key features to be included. In addition, the trade-offs between conservation and fishing resource access should be agreed upon by key stakeholders.
- A decision support tool such as ‘Marxan with Zones’ is a very useful tool to apply to this process.
- The process is a multi-disciplinary process that requires input from various disciplines from resource managers, scientists, and the planner (including GIS specialist). An ideal core team for the zoning process should always have these specialists on-board.



FUTURE ISSUES

With the proclamation of the TMP complete, the equally challenging task of the on-going management of the park begins. The following activities offer just a snapshot of issues to be resolved.

Infrastructure development: Sabah Parks has started to identify areas for development of office buildings, guard posts, and observation centres within TMP.

TMP integrated management plan finalization: including documentation and assignment of roles to all stakeholders.

Legal framework and enforcement: new subsections under the Sabah Parks Enactment of 1984 are being drafted to involve the zoning of activity areas within the waters of TMP. Patrols, new technologies, and methods of surveillance will be identified, such as the use of aerial drones and fish bomb detection devices.

Fish stock monitoring and maintenance: Sabah Parks and other agencies will work with commercial and traditional fishermen to ensure the fish stock in TMP is maintained.

Awareness: Public awareness and economic improvement programs will continue to empower the communities to allow themselves to manage their own coastlines more sustainably.

Sustainable finance: Critical sustainable financing alternatives are being vigorously explored.

Long-term planning: Sabah Parks and WWF will continue their close partnership and have made long-term plans for the next 10 years in the fields of effective management, community outreach, surveillance and enforcement, scientific research, and education.



CONCLUSION

The gazettement of TMP on the May 19th, 2016, makes it the largest natural park and the first large scale multiple-use park in Malaysia. The gazettement took a relatively long time due to the complex process (consultative and participatory) and procedures that needed to be followed under the Parks Enactment 1984. The multiple-use park management approach has been selected to be used to ensure that all the interests of the various stakeholders are taken into consideration in order to achieve the objectives of the TMP. Cooperation from all stakeholder levels, from the government agencies, non-government organizations and local communities is needed to ensure the success and achievement of TMP's gazettement objectives.

ACKNOWLEDGMENTS

The process to gazette TMP received support in various forms, financial and in-kind support from various parties. Members of the TMP ISC were instrumental in providing guidance in the development of the integrated management plan and designing of the zoning plan for TMP. Technical support from the University of Queensland (Decision Support Group) is acknowledged for the planning and designing of the zoning plan with the use of Marxan with Zones. Financial support from the Ministry of Science Technology and Innovation CTI-CFF Programme, WWF network (WWF-Malaysia individual donors, WWF-Switzerland, WWF-Netherlands, and WWF-US), government aid agencies (USAID Coral Triangle Support Partnership), and other NGOs (Malaysia's Wildlife Conservation Fund, GEF UNDP SGP, CI, TNC, Henry Foundation, NFWF) and many donors that have contributed and supported the initiative to gazette TMP.



Trawl fishing in TMP is one of the main fishing activities that need to be improved to address overfishing.

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Tun Mustapha Park (TMP) proposed for gazettelement by the Sabah State Government.

2003



Road mapping Workshop for the proposed TMP held.

2006



Community consultation and surveys to raise awareness on the proposed TMP conducted by WWF-Malaysia.

2006-07



Zoning Criteria Workshop attended by the Sabah Lands and Surveys Department.

2007



Community Survey Results presented to Sabah Parks.

TMP Partnership (TMP Interin Steering Committee - ISC) Proposal was presented to Sabah Parks Board of Trustees.

Land application by Sabah Parks was presented to Kudat Land Utilisation Committee (LUC) and was endorsed after four presentations.

2008



TMP ISC (TMP Partnership) endorsed by the Sabah Parks Board of Trustees.

2009

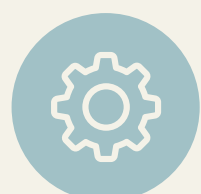


TMP ISC Secretariat established.

2010



THE ROAD TO TUN MUSTAPHA MARINE PARK GAZETTEMENT



2011

Interim Steering Committee (TMP ISC) for the gazettelement of the proposed TMP established.



2012

TMP Integrated Management and Zoning Plan drafted.

TMP Scientific Expedition



2013

Draft TMP integrated Management and Zoning Plan endorsed by the TMP-ISC for stakeholder consultations.

TMP Symposium in conjunction with BMRI UMS's International Conference on Marine Science and Aquaculture.

Stakeholder consultation for zoning plan and integrated management plan.

Finalise TMP Integrated Management and Zoning Plan.

Coral Triangle CTSP project end conference.



2014

Public Hearing

Two events at the IUCN's World Parks Congress, Sydney:
-CTI-CFF Reception - Celebrating Achievements in the Coral Triangle
-From Durban to Sydney Gala reception: A Significant Decade for Protected Area Development



2015

Leaders for a Living Planet award ceremony to the Sabah State Government.



2016

TMP gazette published.

TMP gazettelement celebration in Kudat with the Chief Minister of Sabah.

Gazettelement of Tun Mustapha Park by Sabah State Government