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# A STRATEGIC MANAGEMENT APPROACH TOWARDS PROTECTED AREAS AND INTERNATIONAL ENVIRONMENTAL CONSERVATION

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#### **Abstract**

International environmental conservation efforts are focused on the establishment, expansion and maintenance of Protected Areas. The existence of Protected Areas are customarily justified with biological and social considerations. Biological considerations refer to the value of the Protected Areas from a biological perspective such as biodiversity, threatened and/or endangered species, ecological integrity, and environmental sustainability; and are commonly employed supported by extensive field research. Social considerations refers to the value of the Protected Areas from a human perspective such as aesthetics, enjoyment and utility; and are less prominently employed with comparatively less sociological research conducted on Protected Areas. Sound and sustainable management of Protected Areas require justifications with both biological and social considerations. This paper introduces a strategic management approach that encompasses both social and biological considerations. By bridging both biological and social considerations, strategic management approach is deemed more robust and appropriate. Strategic management approach reveals Domestic Tourists as a key stakeholder with a strong influence on the establishment, expansion and maintenance of Protected Areas. The role and effect of Domestic Tourists is investigated with a case study on Protected Areas in the State of Penang in Malaysia. Penang hosts six (6) Protected Areas despite being a small State with limited land. The findings reveal that Domestic Tourists are important key stakeholders, but their influence varies among the Protected Areas. These findings and insights establishes the importance of a strategic management approach towards Protected Areas and recommendations are proposed accordingly.

**Keywords:** Strategic management, stakeholder theory, environmental conservation, Protected Area, case study

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## Introduction

Environmental conservation and addressing climate change is a crucial global agenda. The United Nations Climate Change Conference 2021 (popularly known as "COP26") highlighted the urgency for all countries to collectively address this issue (Smith et al, 2021). Extreme weather patterns due to global warming and environmental degradation poses an existential threat to many communities and countries throughout the world (Intergovernmental Panel on Climate Change, 2022). Establishing Protected Areas is the central strategy of international environmental conservation efforts. The United Nations' "Aichi Target 11" states, "By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved..." (Convention on Biological Diversity, 2019).

Alarmingly, only a few countries have met the Aichi Target 11(10 out of 196 signatory countries as at 19 Aug 2019), and many are actually moving away from this target (22 out of 196 signatory countries as at 19 Aug 2019). Mascia et al (2013) have identified 543 instances of Protected Area Downgrading, Downsizing and Degazettement (PADDD) from 1900-2010. Customarily, biological and social approaches are deployed in justifying the establishment of Protected Areas. This conceptual paper adopts an alternative approach of deploying a strategic management approach towards the phenomenon of Protected Areas and PADDD. A case study methodology is employed with the state of Penang in Malaysia selected to investigate Protected Areas from a strategic management approach. Policy recommendations are subsequently made based on the findings and results.

# **Literature Review**

The justifications for Protected Areas fall into the two broad areas of biological considerations and social considerations. Biological considerations refers to the value of the Protected Area towards biodiversity, threatened and/or endangered species, ecological integrity, and environmental sustainability. Biological considerations are the foundations of the international environmental conservation agenda as reflected in the United Nation's "Aichi Target 11" that advocates at least 17 per cent of terrestrial and inland water and 10 per cent of coastal and marine areas to be protected by the year 2020 (Convention on Biological Diversity, 2019). Most researchers from the biological and natural sciences disciplines justify prioritizing Protected Areas based on biodiversity and threatened and/or endangered species (Margules et at, 2002; Wan et al, 2015; Nori et al, 2016; Danielsen and Treadaway, 2004).

Social considerations refers to the value of the Protected Area towards human appreciation, enjoyment and utility. It is derived from the perspective of humans within society. The first Protected Area of the modern era, Yellowstone National Park in the U.S was established (in 1872) on the basis of social value "as a public park or pleasuring ground for the benefit and enjoyment of the people" (Phillips 2004). Social considerations rests on the value and utility from a human and social perspective and is frequently invoked in deliberations on recreational utility, tourism value and economic ramifications of Protected Areas (Arrandale, 2006; Orr, 2005; Frisch and

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Wakelee, 2011; Eagles, 2002). Social considerations and biological considerations at times can compete and conflict in debates on the management and physical development of Protected Areas (Arrandale, 2006; Orr, 2005).

Examining the phenomenon of Protected Area Downgrading, Downsizing and Degazettement or "PADDD" is illustrative of the merits of the biological and social approaches. The causes of PADDD are identified as forestry, mining, oil and gas, industrial agriculture, industrialization, infrastructure, land claims, rural settlement, subsistence, degradation, shifting sovereignty, refugee accommodation, and conservation planning (Mascia et al 2013). It is observed that most, if not all of the causes of PADDD are due to changes in social considerations. The controversy surrounding the Arctic National Wildlife Refuge in the U.S. with regards oil drilling is illustrative. The public debates and policy proposals principally revolve around social considerations such as economic benefits and job opportunities. Biological considerations are not the main focus and are often absent (Bourne, 2018; Johnson et al., 2019; Rutkin, 2015).

# **Strategic Management Approach**

Strategic management hails from the discipline of business. The strength of strategic management is its inherent flexibility and applicability in various contexts. A key element of strategic management is the concept of stakeholders. This concept takes into consideration and recognizes all stakeholders related to Protected Areas and therefore bridges and encompasses both biological and social considerations. As such, strategic management is robust and suitable for application towards Protected Areas.

Edward Freeman's seminal book "Strategic Management A Stakeholder Perspective" (Freeman, 1984) introduced the concept of stakeholders in business organizations. Prior to this, the preoccupation of business organizations was in meeting the expectations of shareholders who are the legal owners of a business. Businesses organizations are indeed legally bound to the wishes of their owners as Milton Friedmann, winner of the 1976 Nobel Memorial Prize in Economic Sciences puts it, "That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to the basic rules of society, both those embodied by law and those embodied in ethical custom" (Friedmann, 1970). While maintaining the veracity of the shareholder system, Freeman expanded the horizon of businesses organizations beyond their legal owners towards their operating environment.

Applying the strategic management approach towards Protected Areas reveal the following stakeholders as visually depicted in the following diagram:

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Diagram 1 Stakeholders of Protected Areas

The stakeholders of Protected Areas include both biological and social stakeholders, which collectively contribute towards their biological and social considerations. Biological stakeholders include Biodiversity, Environment, Flora and Fauna. Biological stakeholders cannot articulate their thoughts nor voice their interests, and are often marginalized in public policy deliberations. The onus is on policy-makers to "give voice to the voiceless" to protect the interests of these stakeholders.

Social stakeholders include Local Communities, Domestic Tourists, General Citizens, Business Interests, Political Interests, International Tourists and the International Community. Social stakeholders can articulate their interests, but in varying degrees and magnitude. For example, Local Communities from the lower socio-economic strata are frequently less educated and correspondingly less articulate in asserting their interests. On the other extreme, Political Interests and Business Interests may have a disproportionally higher leverage in articulating and asserting their interests. Evidently, different stakeholders contribute different weightages towards the calculus of justifying Protected Areas. Sound strategic management of Protected Areas requires balancing and calibrating the different weightages contributed by each stakeholder towards the Protected Area.

The strategic management approach reveals that Domestic Tourists have a disproportionately high weightage towards the justification calculus. Domestic Tourists are defined as visitors and users of Protected Areas from the same country that the Protected Area is situated. Domestic Tourists are also the General Citizens of that country and some are also part of the Local Communities. Therefore, Domestic Tourists and are "double stakeholders" or even "triple stakeholders". Nonetheless, the importance and prominence of Domestic Tourists towards

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Protected Areas varies considerably by country. In developed countries like the United States of America, domestic tourists are a crucial and vocal stakeholder strongly influencing public policy of Protected Areas. In less-developed countries, the role of domestic tourists can be much less prominent as their Protected Areas may be established to cater more for International Tourists rather than Domestic Tourists. In developing countries, the role of domestic tourists is developing and congealing, hence the importance of this research centered on a case study of the State of Penang in Malaysia.

# **Case Study**

The strategic management approach is deployed on a case study of the state of Penang in Malaysia. Case study methodology with a qualitative research paradigm is considered the most appropriate for this study as it is a contemporary phenomenon (e.g., a "case") set within a real-world context (Denscombe, 2007; Yin, 2009). The data gathering methodology employed is content analysis of reputable publications and the official websites of government agencies.

Malaysia is a medium-sized developing country with average per capita income of USD10,118 in 2017 (Worldbank, 2019) and Penang is the second smallest State in Malaysia at only 1,048 square kilometres (405 square miles) but is densely populate with 1.77 million inhabitants in 2021 (Department of Statistics Malaysia, 2022). Total Protected Areas in Penang is 51.53 square kilometres representing 4.9 percent of the total land area (Jabatan Perhutanan Negeri Pulau Pinang, 2019).

Land-use and environmental conservation are highly contested and contentious (Lim, 2018; New Straits Times, 2017). From the biological perspective, Penang is a tropical island ecosystem that is rich in biodiversity (Chan et al, 2003). There are six (6) Protected Areas comprising the Penang National Park and five public nature parks within recreational forests as follows:

Table 1 Protected Areas in Penang, Malaysia

	Protected Area	Management/Jurisdiction
1	Penang National Park	Department of Wildlife and National Parks
2	Teluk Bahang Forest Park	Department of Forestry
3	Air Hitam Dalam Education Forest	Department of Forestry
4	Bukit Mertajam Forest Park	Department of Forestry
5	Bukit Panchor State Park	Department of Forestry
6	Penang Hill	Special Area Plan

Penang National Park is a popular Protected Area among both domestic and international tourists. It was formerly the Pantai Acheh Forest Reserve and gazetted as a national park in 2003 (Kumar, 2004). The upgrade to a national park was initiated and supported by Domestic Tourists, General Citizens, academia and local non-government organizations led by Malaysian Nature Society. The membership of Malaysian Nature Society comprise General Citizens who are nature lovers many of whom are regular Domestic Tourists of Protected Areas. In terms of size, the Penang National Park is one of the smallest national parks in the world (Chan et al, 2003). It have

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neither the vistas of established bigger national parks in Malaysia nor emblematic Malaysian fauna like the endangered Malayan tiger and orang utan. Malaysian Nature Society had to work employ social considerations and engaged the academic community, local residents, domestic visitors, general citizens and political interests in order to justify the proposed formation of Penang National Park.

Teluk Bahang Forest Park and Bukit Mertajam Forest Park are both very popular among Domestic Tourists. Various amenities such as rest shelters, toilets, changing rooms, community halls, shops, camping sites and dormitories are provided (Jabatan Perhutanan Negeri Pulau Pinang, 2022). Both these parks are especially popular with Domestic Tourists during weekends and school holidays as a venue for picnics, family outings, recreation and exercise. In contrast, Bukit Panchor State Park and Air Hitam Dalam Educational Forest are less popular among Domestic Tourists let alone International Tourists (Lo, 2019). Air Hitam Dalam Educational Forest has been reduced in size as part of it was degazetted for flood mitigation infrastructure in 2006 (Ang & Chan, 2010, unpublished work). Due to its lack of popularity, the public is virtually unaware of this occurrence of Protected Area Downgrading, Downsizing and Degazettement (PADDD).

Penang Hill is rather unique as it not designated as a park. It is a recreational hill station originally developed by the British administration when Penang was a colony of the British Empire. Development is limited, controlled and subject to adherence to the Penang Hill Local Plan and Penang Hill Special Area Plan gazetted in 1999 and 2016 respectively (PLANMalaysia@Pulau Pinang, 2022). Penang Hill is very popular among Domestic Toursts and International Tourists. Proposals by Business Interests and Political Interests to develop Penang Hill on a large-scale with entertainment centers, hotels and shopping complexes in the 1990's elicited strong opposition from the Local Communities, Domestic Tourists and General Citizens (Netto, 2011). In short, commercially developing Penang Hill on a large-scale as proposed by Business Interests and Political Interests is untenable as they are outweighed by opposition from Local Communities, Domestic Tourists and General Citizens.

# **Results and Discussion**

The case study of Penang instructively reveals the importance of Domestic Tourists as a key stakeholder in the strategic management of Protected Areas. Penang National Park and Penang Hill are good examples of the positive influence of Domestic Tourists and their immense contributions toward the formation, expansion and maintenance of Protected Areas. Conversely, lack of popularity and engagement amongst Domestic Tourists erodes the social considerations of Protected Areas leading to risks of Protected Area Downgrading, Downsizing and Degazettement (PADDD) as has occurred in Air Hitam Dalam Educational Forest.

Stakeholder Theory is shown to be efficacious in analyzing and contextualizing the phenomenon of Protected Areas. The narrative on Protected Areas customarily falls on the dichotomy of biological and social considerations. Stakeholder Theory provides a fresh perspective that eliminates this dichotomy, and consolidates biological and social considerations as important stakeholders whose interests require equal attention in public policy deliberations on Protected Areas.

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Another pertinent finding is the fact that even in a small State like Penang, the effects of domestic tourists towards the social justification of Protected Areas varies considerably. All the Protected Areas in Penang are connected by roads and less than two hour's drive from each other. As such, the socio-economic context of the Protected Areas are largely constant. In spite of this, significant variations in the experiences of Domestic Tourists are present suggesting a very dynamic situation that is yet to be fully understood.

## **Recommendation and Conclusion**

The deployment of a strategic management approach towards Protected Areas has establish the importance of Domestic Tourists as a key stakeholder in international environmental conservation efforts. The strategic management approach is shown to be suitable and appropriate as it takes into consideration both biological and social considerations in a systematic and inclusive framework. The strategic management approach shows that the establishment, development and continued support of Protected Areas is fundamentally a social phenomenon requiring sound management, social justification and public support.

Further investigations into the experiences of Domestic Tourists as a key stakeholder is recommended as this phenomenon is yet to be fully understood as reflected in the varying results in the case study. A diversity of research approaches is encouraged for a more comprehensive understanding and further support the international environmental conservation agenda.

## References

- Ang, S.C. & Chan, N.W. (2010). *Mitigating Floods at Wetland Natural Heritage A Case Study at Air Hitam Dalam Educational Park* (unpublished paper). Universiti Sains Malaysia.
- Arrandale, T. (2006). National Parks Under Pressure: Should conservation or recreation take precedence?, *CQ Researcher*, 16(35), 817-840.
- Bourne, J.K. (2018). A refuge at risk. National Geographic, 233(6), 112-127.
- Chan, N.W., Ismail, W.R. & Ibrahim, A.L. (2003). The geography, climate and hydrology of Pantai Acheh Forest Reserve. In Pantai Acheh Forest Reserve: The case for a state park. Penerbit Universiti Sains Malaysia.
- Convention on Biological Diversity, (2019, Sept 5). *Aichi Target 11*. <a href="https://www.cbd.int/aichi-targets/target/11">https://www.cbd.int/aichi-targets/target/11</a>
- Danielsen, F. & Treeadaway, C.G. (2004). Priority conservation areas for butterflies (Lepidoptera: Rhopalocera) in the Philippines Islands, *Animal Conservation*, 7(1), 79-92.

eISSN:2805-5187 Vol.2022:014

- Denscombe, M. (2007). *The Good Research Guide for small-scale social research projects* (3rd ed.). McGraw Hill, Open University Press.
- Department of Statistics Malaysia. (2022, March 31). *Pulau Pinang*. <a href="https://www.dosm.gov.my/v1/index.php?r=column/cone&menu\_id=SEFobmo1N212cXc5TFILVTVxWUFXZz09">https://www.dosm.gov.my/v1/index.php?r=column/cone&menu\_id=SEFobmo1N212cXc5TFILVTVxWUFXZz09</a>
- Dermawan, A. (2017, Feb 4). *We Will 'Save Penang Hill, again'* https://www.nst.com.my/news/2017/02/209515/people-will-save-penang-hill-again
- Eagles, P.F.J. (2002). Trends in Park Tourism: Economics, Finance and Management, *Journal of Sustainable Tourism*, 10(2)
- Freeman, R. E. (1984). Strategic Management A Stakeholder Approach. Pitman Publishing Inc.
- Friedmann, M. (1970, September 13). The Social Responsibility of Business Is To Increase Its Profits. *The New York Times Magazine*
- Frisch, S. A. & Wakelee, D. (2011). Resisting the Pressure of the Present: Channel Islands National Park as a Case Study in Public Policymaking, *The Journal of Policy History*, 23(2).
- Intergovernmental Panel on Climate Change (2022, March 31). Climate Change 2022 Impacts, Adaptation and Vulnerability. www.ipcc.ch
- Jabatan Perhutanan Negeri Pulau Pinang (2019, Sept 5). *Kedudukan Serta Keluasan Hutan Simpanan Kekal Di Pulau Pinang*. <a href="http://jhn.penang.gov.my/index.php/bm/">http://jhn.penang.gov.my/index.php/bm/</a>
- Jabatan Perhutanan Negeri Pulau Pinang (2022, March 31). *Taman Rimba Telok Bahang*. <a href="https://jhn.penang.gov.my/index.php/en/taman-rimba">https://jhn.penang.gov.my/index.php/en/taman-rimba</a>
- Johnson, L., Spanbauer, M., & Button, P. (2019). How Valuable are National Parks? Evidence from a Proposed National Park Expansion in Alaska. *Journal of Park and Recreation Administration*, 37(2), 1-15.
- Kumar, K. (2004, September 15-16). *Long road to a National Park* [Conference presentation]. Regional Conference on Ecological and Environmental Modeling (ECOMOD)
- Lim, M.H. (2018, April 17). *Why Klang Valley's road-building frenzy not for Penang*. <a href="http://www.freemalaysiatoday.com/category/opinion/2016/06/02/why-klang-valleys-road-building-frenzy-not-for-penang/">http://www.freemalaysiatoday.com/category/opinion/2016/06/02/why-klang-valleys-road-building-frenzy-not-for-penang/</a>
- Lo, T.C. (2019, Sept 5). *Lonely at the state park* <a href="https://www.thestar.com.my/metro/metro-news/2019/06/22/lonely-at-the-state-park">https://www.thestar.com.my/metro/metro-news/2019/06/22/lonely-at-the-state-park</a>

eISSN:2805-5187 Vol.2022:014

- Margules et al, (2002). Representing biodiversity: data and procedures for identifying priority areas for conservation, *J. Biosci.*, 27(4) 309-326.
- Mascia and Pailler, (2010). Protected Area Downgrading, Downsizing and Degazettement (PADDD) and its Conservation Implications, *Conservation Letters*, 00(2010), 1–12.
- Netto, A. (2011, August 24). *Penang Hill, Berjaya and Chong Eu/Tzu Koon*. <a href="https://anilnetto.com/democracy/civil-society/penang-hill-berjaya-and-chong-eu/">https://anilnetto.com/democracy/civil-society/penang-hill-berjaya-and-chong-eu/</a>
- Nori, J., Torres, R., Lescano, J.N., Cordier, J.M., Periago, M.E. & Baldo, D. (2016). Protect areas and spatial conservation priorities for endemic vertebrates of the Gran Chaco, one of the most threatened ecoregions of the world, *Diversity and Distributions*, 22, 1212-1219.
- Orr, S.K. (2005). National Parks and Sustainable Development: The Challenges and Opportunities of Doing Business in a Protected Environment. American Political Science Association 2005 Annual Meeting, Washington DC.
- PLANMalaysia@Pulau Pinang (2022, March 31). Rancangan Kawasan Khas (RKK). Pulau Pinang Town and Country Planning Department. https://jpbd.penang.gov.my/index.php/en/services/development-plans/special-area-plan-sap
- Rutkin, A. (2015, February 4). Twin moves on Arctic drilling stir environmental debate. NewScientist. <a href="https://www.newscientist.com/article/dn26910-twin-moves-on-arctic-drilling-stir-environmental-debate/">https://www.newscientist.com/article/dn26910-twin-moves-on-arctic-drilling-stir-environmental-debate/</a>
- Phillips, A. (2004). *Parks The international journal for protected area managers*. 14(3), World Commission on Protected Areas (WCPA) of the IUCN The World Conservation Union (ISSN: 0960-233X).
- Smith, P., Beaumont, L., Bernacchi, C.J., Byrne, M., Cheing, W., Conant, R.T., Corufo, F., Fend, X., Janssens, I., Jones, H., Kirschbaum, M.U.F., Kobayashi, K., LaRoche, J., Luo, Y., McKechnie, A., Penuelas, J., Pioa, S., Robinson, S., Sage, R.F., Suggest, D.J., Thackeray, S.J., Way, D. & Long, S.P. (2021, March 31). Essential outcomes for COP26. *Global Change Biology*. <a href="https://abdn.pure.elsevier.com/en/publications/essential-outcomes-for-cop26">https://abdn.pure.elsevier.com/en/publications/essential-outcomes-for-cop26</a>
- The World Bank, (2019. Sept 5). GDP per capita (current US\$). <a href="https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=MY&year\_high\_desc=false">https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=MY&year\_high\_desc=false</a>
- Wan, J., Wang, C., Yu, J., Nie, S. & Han, S. (2015). Model-Based Assessment of Priority Protected Areas: A case Study on Fraxinus mandshurica in China, *Polish Journal of Environmental Studies*, 24(2), 725-733.
- Yin, R.K. (2009). Case Study Research Design and Methods (4th ed.). Sage Publications Inc.