

Which Strategy is the Best Practice for Environmental Tourism Impact in Thailand?

Nonnaporn Kitisripanya ¹ and Siriporn Pongkonglad²

¹Faculty of Liberal Art, Rajamangala University of Technology Phra Nakhon

Abstract

This study aims to identify strategies to manage tourist destinations of Thailand into a sustainable way focused on environmental aspects. Firstly, the author reviews environmental tourism impact in Thailand which has occurred to degrade tourist destinations. It has been evidenced that garbage disposal becomes the most significant problem which Thailand is faced while it is a challenge for tourism income. Various strategies which tourism management planner applied to reduce the impact are raised to enhance environmental sustainable tourism, however the writer proposes Education and Communication Theory, Stakeholders' Involvement, Payment for Ecosystem Services, Social Network by Facebook, and a campaign by Tourism Authority of Thailand. Furthermore, Thailand has limit in social, cultural, and geological features. It is concluded that there is no single strategy to combat or encounter with the problem, however we also need the right policy decision making to solve all the problems, or to determine which is the best suit for Thailand tourism impacts in any dimensions.

Keywords: Tourism Impact, Strategy, Education and Communication Theory, Stakeholders' Involvement, Social Network

Introduction

Tourism is regarded as one of the most significant industries which involves in a broad range of enterprises, and has influenced the empowerment in the quality of people's life in destination regions (Mowforth & Munt, 2003; Kelkit, Celik & Esbah, 2010; Liu et al., 2012; World Travel and Tourism Council 2016a). Moreover, the World Tourism Organization (2016b) contends that tourism is as a key element for socio-economic progress by providing employment, and encouraging businesses and infrastructure investment in tourist destinations. It has been evidenced that international tourism industry has been growing dramatically over the last six decades. According to the inter-

national report, the number of inbound tourist arrivals increased at a rate of 6.5% annually from an estimated 25 million in 1950 to 806 million in 2005 (Blanke, n.d.). World Travel and Tourism Council (2013a) estimated that there were 1.0 billion international tourist arrivals in 2012 and projects that the number will increase to 1.8 billion in 2030, however Europe remains the most popular destination region for international tourists. It can be acknowledged that tourism where is rich of environmental and cultural assets is solely the most crucial industry that continuously brings hopes and development across sectors such as generating employment both at international and local level, providing secondary economic incomes, encouraging wellbeing in the destinations, and providing a range of social benefits to its own country without a large amount of investment.

For Thailand, tourism has been treated as one of the most significant potentiality to develop society and economy by encouraging foreign income, generating employment, leading to boost rural transportation development, and supporting the small and medium-sized business sector. Ministry of Tourism and Sports, n.d.); Choibamrung (2008); Pukkalanun, Inkapatanakul, Piputsitee and Chunkao (2013); and Turner (2013) stated that tourist expenditure is crucial to the growth of the Thai economy hence it generates local job opportunities and encourages the best services of small and medium-sized in rural areas throughout the country. Supporting the assertion by the Ministry of Tourism & Sports that tourism can lead to employment generation and create local job opportunities, employment data related to tourism demonstrates that travel and tourism in Thailand directly generated 2,563,000 jobs in 2013 (6.6% of total employment). Including employment by hotels, travel agents, airlines and other passenger transportation services, the total estimated contribution is 60,115,000 jobs (World Travel and Tourism Council, 2013b)

However, negative tourism impact of each country has occurred and become to its own national threats which all countries try to recover as it spoils its national income such aspects as environmental, social, or economic dimension. In this paper, the authors focus on environmental tourism impact of Thailand which has emerged to degrade tourist destinations, and it has been raised as a severe problem not only for decision making, but for anybody also. It has been an evidence that garbage disposal has become the most significant problem, and has been a challenge for tourism management planners to combat while tourism income is a critical concern.

Several cases of negative consequence have been studied for example, a case of low water quality in Muk Island, Trang Province where researcher tested water quality in the area and found that water quality during tourist season declined in quality compared to the time during low tourist season (Tanyaros, 2009) or coral reef diving in many diving spots which has damaged the natural beauty of the coral reef by the fins and underwater garbage (Worachananant, Carter, Hockings & Reopanichkul, 2008). One severe environmental problem in tourist destination is a case of garbage dumping in Tarutau National Marine Park, which is one of Thailand's best-known tourist destinations, and where is the cause of a threat to ecolog-

ical tourism management (Kitisripanya, 2014). There are also many cases of garbage disposal impairing tourist destination of Thailand including, a case of Petchabun Province and Phu Kradung in Loei Province (Post Today 2017). These problems are caused by a lack of sustainable tourism management in the areas (Worachananant, Carter, Hockings & Reopanichkul, 2008; Tanyaros, 2009; Kitisripanya, 2014; Post Today, 2017). It has been reviewed that environmental tourism impacts have occurred in tourist destinations across Thailand while tourism income is a challenge. Therefore, policy making decision in Thailand should seek for strategies to combat these problems.

Various strategies which tourism management planners applied to reduce the impact are raised to enhance environmental sustainable tourism management, however the writer proposes Education and Communication Theory supported by Marion and Reid (2007); Brown, Ham and Hughes (2010); and Hungerford (2010). Stakeholders' Involvement where community and policy making decision work in cooperation, Payment for Ecosystem Services recommended by Nelson and friends (2009), Social Network by Facebook which is regarded as the most potential strategy in the 4G Era, and a campaign by Tourism Authority of Thailand who applied Green Heart, Green Logistics and Green Services, Green Destination Green Community. Therefore, to maintain environmental tourism impact of Thailand, or to find Thailand's best practice strategy to suit tourist destinations in eliminating environmental degradation, it is one of the rigorous duties for the government who has been working industriously to conquer with.

Objectives

1. To identify strategies to manage tourist destinations of Thailand into a sustainable way.
2. To define negative consequences of tourism impact occurred in Thailand.

Literature Review

This section reviews 5 frameworks to encounter with negative consequence especially garbage disposal which impairs natural beauty of Thailand. Education and Communication Theory, Stakeholders' Involvement, Payment for Ecosystem Services, Social Network by Facebook, and a campaign by Tourism Authority of Thailand were applied to use in many countries. To find the best way to lower environmental impact in tourist destinations of Thailand is accordingly crucial and hard jobs as the followings.

Education and Communication Theory

Education and Communication Theory has been applied to enhance awareness in a positive feature. It is also established to encourage environmental concern in tourist destination. The communication approach attempts to influence the behaviour of visitors in destination for good practices in national parks. A significant strategy of communication theory which is devoted to combat environmental degradation created by tourist activities and influencing visitors includes a use of Planned Behaviour Theory (Brown, Ham & Hughes, 2010). The study found that the way to eliminate garbage disposal and encourage conservation behaviour in Mt Field National Park, Tasmania, was to encourage appropriate rubbish disposal methods by using theory-based of communication. A study by Marion and Reid (2007) has shown that educational and awareness messages of Communication Theory through the booklets, pamphlets, signs and videos such as *Leave No Trace, Codes of Conduct, and Environmental Guidelines for Tourists* (Marion & Reid, 2007, p. 7) can:

- 1) Reduce per capita and cumulative resource and experiential impacts
- 2) Aid in keeping resource and social conditions within acceptable limits
- 3) Reduce the need for site management or regulatory actions
- 4) Provide a key component of sustainable tourism programs.

Education through ecotourism can also encourage environmental perception. A study by Powell and Ham (2008) in the Galapagos Islands, Ecuador, on whether ecotourism can lead to pro-conservation perspectives, concluded that ecotourism related to the '4Es' of environmental conservation, equity, education and economic benefits can increase knowledge, attitude and behavior of environmental protection, if the ecotourism programs include well-designed and delivered interpretation during the ecotourism experience. Ultimately, successful achievement of the transition to environmental sustainability will not only be focused on education, but also by using it intelligently to set goals to encourage good decisions and to take appropriate actions (Mcelroy, 2003).

An intelligent application of communication theory such Planned Behavior Theory and environmental education via ecotourism are therefore advised for Thailand stakeholders as a possible means to practice for the problems that occurred in tourist destination, such in Tarutau National Marine Park, Muk Island, Trang Province, a case of garbage disposal in Petchabun Province, Phu Kradung in Loei Province, or other destinations that encounter with similar problems due to this strategy assists to promote environmental degradation awareness, enhance participation, and raise good practice of conservation.

Stakeholders' Involvement

In tourism, stakeholders refer to a group of people involved and take part in tourism industry. They can include city or local government regulators, hotels, and the accommodation providers and marketing and management organizations at a single destination (Sheehan, Brent & Hudson, 2007). In general tourism research, scholars and researchers divide stakeholders into four categories: tourists, residents, entrepreneurs, and local government officials (Byrd, Bosley & Dronberger, 2009; Goeldner & Ritchie, 2003). Some studies have identified a correlation between sustainable tourism development and stakeholders' involvement as a significant strategy to enhance tourism management in a sustainable way. A study of the impact of tourism on indigenous people by Greathouse-Amador (2005) in Cuetzalan, Mexico, found that tourism development can enhance cooperation in the local community, thereby fostering cultural maintenance, and creating a sense of responsibility to the environment (Greathouse-Amador, 2005). Such a relationship between tourism and stakeholder participation can have a positive impact on tourist destinations. In Thailand, stakeholders' involvement is applied to reduce tourism impact in several areas, for example a stakeholder involvement of Rak Satun Group and Rak Lae Pa Fa Satun Project (Satun Province Administrative Office, n.d.) who act to maintain Tarutao National Park clear from garbage by corporate with all stakeholders in Satun Province such as people from Satun Council, private enterprises including transportation company, resort and restaurant owners, volunteers, and tourists before start tourism season in November of each year (Rak Satun, n.d.). A study by Nakwa and friends (2008) in Tung Salang Luang National Park is a case. It presumes that a bird watching destination will be spoiled if regulators and community do not encourage participation on sustainable management.

Stakeholders' involvement is advised to reduce negative consequences all over the world including Thailand because it assists to create people to people connection and participation which may transfer to a sense of belonging. Furthermore, policy making decision can encourage people awareness on environmental sustainability through this scheme.

Payment for Ecosystem Services

Payment for ecosystem services is a method to seek for ecologically regional conservation and to gain financial incentives from people who benefit from the area such as land, freshwater and marine resources, as well as to give people who provide services for ecological maintenance (McNeely, 2007; Nelson, et al., 2009; McAfee & Shapiro, 2010; Groot, 2011). Therefore, the idea of payment for ecosystem services can be used to share the same concept to avoid environmental tourism impact. Payment for ecosystem services may be

a potential strategy to advise Thailand's policy decision making on environmental conservation and to encourage community livelihood.

To introduce payment for ecosystem services as one solution for the garbage disposal, or natural beauty degrading, it is crucial to understand its characteristics. According to the Global Environment Facility (2010), payment for ecosystem services is a system that allows society to pay service providers for ecological maintenance. Moreover, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, 2009, p. 8) states: "...the beneficiary from the ecosystem service makes a payment or provides another form of reward to the land owner or person who has the rights to use the ecosystem...for managing the ecosystem a way that secures ecosystem services."

It is likely that payment for ecosystem services emerged to promote ecological conservation and maintenance by providing financial incentives to people who provide the services. Payment for ecosystem services programs lead to equity to all parties in the system, therefore the United Nations Food and Agriculture Organisation (FAO, 2011, p.3) recommends that payment for ecosystem service schemes must be in a place where:

- 1) The demand for at least one ecosystem service is clear and financially valuable to one or more 'buyers'.
- 2) The provision of ecosystem services is threatened, but the adoption of specific land-use/management practices has the potential to address the supply constraints.
- 3) A trusted intermediary is available to assist both parties in developing the negotiation and provide expertise in the payment for ecosystem service design.
- 4) Clear criteria are able to be established to ensure compliance of the contractual agreement by both parties.
- 5) Land tenure and usage rights are clear
- 6) There is a cross-sectoral coherence between existing policies and laws and payment for ecosystem service requirements.

To assist policy making decision to preserve the natural beauty of Thailand, it is essential to Practice Payment for Ecosystem Services to tourist destinations in order to provide facilities, or infrastructure in the areas to ensure that environment is able to maintain.

Social Network by Facebook

Social networks are regarded as a major factor to understand relationships within social capital. As Portes (1998, p. 3) states: "...social networks are not a natural given and must be constructed through investment strategies oriented to the institutionalisation of group relations, usable as a reliable source of other benefits."

Social networks or social institutions need to be identified. Firstly network types, formal and informal ties comprise of different institutions, next family units where trust and reciprocity is generated, then friends and neighbours where social capital is promoted, communities of interest where associational membership is engaged to form stocks of social capital, and formally constituted groups where citizen interactions with institutions creates trust and reciprocity for social capital all represent levels of group relationships which is the foundation to form social capital. The ties between group connection the most significant to create firm networks.

A study investigated adult Australian Facebook users and examined the ways in which social ties and networks were affected by this online tool. The study found that Facebook had potentially increased the users' social capital because the tool had facilitated social and community engagement. Social networks can lead to social awareness. A study by Drushel (2013) on HIV/AIDS, social capital and online social networks found that online mediators like Facebook, Twitter and HIV websites were vital in generating awareness campaigns and offered the formation of strong and weak ties in the HIV patients' society. The strong ties were derived from close online friendships via Facebook groups and forum participation and responses to personal advertisements on the website, while weak ties were organisational information on websites and Facebook. Additionally, Drushel (2013) suggested that online social networks by opinion leaders have the potential to disseminate messages on HIV/AIDS awareness and testing. However, some social capital dimensions can create vague characteristics as Portes (1998, p. 21) stated: 'there is little ground to believe that social capital will provide a ready remedy for major social problems, as promised by its bolder proponents.'

A study by Dipietro, Crews, Gustafson and Strick, (2012) on the use of social networking sites in the restaurant industry in the U.S. found that social networking was only useful for advertising and promoting the restaurants' brand because this type of resource is inexpensive for their marketing process

Using social network to raise people's awareness on environmental concern is a critical aspect hence policy decision making should understand how each Thai society is tied and what relationship people belong to. On the scheme of Thailand, it is a challenge for those who create awareness campaigns.

A campaign by Tourism Authority of Thailand

Tourism Authority of Thailand has launched a campaign to raise awareness on environmentally friendly travelling in 2008. These are Seven Greens which includes Green Heart, Green Activity, Green Community, Green Logistic, Green Service, Green Attraction, and Green Plus. They are also demonstrated as the followings:

Green Heart: Green heart encourages tourists to be environmentally friendly travellers. Knowledge, understanding and realization are key concepts involved in being green heart travellers. Green heart travellers are also recommended to (Tourism Authority of Thailand, n.d.a):

1) Learn about the attraction both its resources and environment, activities and management from papers before departure and while there.

2) Strictly follow the rules and regulations set by officials at the attractions, especially those ecologically challenged scale or historical and archaeological sites or even ancient communities.

3) Get rid of garbage at the designated place.

4) Use energy-saving vehicles that emit the least amount of greenhouse gas.

5) Set up camp only at the designated area.

6) Follow the marked trail and avoid trampling over seedlings and baby plants.

7) Do not feed wild animals as it could change their eating behaviour.

8) Do not touch wild animals.

9) Do not buy animal body parts, relics or products made of or from rare or near extinct species.

10) Do not collect fossils, shells or rocks.

11) Inform officials of misconduct by other tourists.

12) Do not verbally or physically disrespect the culture and local lifestyles.

Green Activity: Green activity supports communities to provide tourists with cultural and environmental awareness tourism programs. Tourists are also recommended to purchase eco-friendly products in order to minimise energy consumption and carbon emissions (Tourism Authority of Thailand, n.d.a).

Green Community: This scheme is to support community-based tourism and to encourage conservation of both cultural and environmental identities. In the case of Thailand, tourists should respect traditional Thai lifestyles and local pastoralists' livestock practices (Tourism Authority of Thailand, n.d.a).

Green Logistics: Green Logistics means encouraging tourists to use environmentally friendly transportation. Tourists are recommended to change the mode of transportation to use transport such as public buses, trains, the MRT (Mass Rapid Transit system), the BTS Skytrain (Bangkok Mass Transit System), or bicycle, and alter consumption behaviour and practices such as using eco-energy, constant car maintenance, switching off the engine while parking the car, or driving at 90 kilometres per hour (Tourism Authority of Thailand, n.d.a).

Green Services: TAT encourages tourism businesses to seek services that to follow an environmental practices code. This includes influencing tourists to use services with environmental preservation standards. Green hotel activities are encouraged for environmentally-friendly green

services, such as customers reusing their towels or using sanitary napkins only when necessary and providing customers with eco-friendly products such as providing customers with herbal extracts soap and shampoo (Tourism Authority of Thailand, n.d.a).

Green Attraction: Green attraction is for encouraging stakeholders in the area to develop tourism with good quality management that considers the environment. It specifies that tour operators have to operate their business with respect to nature and the local culture (Tourism Authority of Thailand, n.d.a).

Green Plus: This concept aims to encourage voluntary activities. TAT supports individuals, groups and organisations to participate in environmentally-friendly activities held by TAT or other organisations. TAT also recommends that wider society practice the 3Rs concept of reduce, reuse and recycle (Tourism Authority of Thailand, n.d.a).

Collectively, Seven Greens program provides a conceptual framework by establishing practical guidelines between tourism promotion and a sustainable environmental scheme. The program is also to encourage to form dynamic partnerships which provide a cooperative framework for the implementation of green initiatives in tourist destinations (Tourism Authority of Thailand, n.d.b). This concept is a strategy to promote sustainable tourism in Thailand which may be used effectively because of the following reasons:

- 1) The Green Heart concept encourages tourists to learn about tourist attractions before visiting the place. This issue will benefit Thailand's destination in order to create good practices.
- 2) The campaign advises travellers to dispose of garbage in designated places.
- 3) The campaign recommends visitors to follow the rules and regulations set by officials at tourist attractions, especially in ecologically sensitive areas.
- 4) Green Community supports the local people to protect the environment therefore it may encourage tourists to avoid negative impacts on the environment.
- 5) Green Attraction allows business sector, especially tour operators, to provide environmentally-friendly activities to tourists.

Conclusion

The authors identify that there is no single strategy to enact with environmental degradation of Thailand, and purpose integrated strategy to recover environmental tourism impact due to its natural diversity, such as mountainous tourism, and archipelago tourism. We cannot specify, or make decision that which strategy is the best suit to low risk environmental tourism impacts which degrade the charm of it. A study by Kitisripanya (2014) concluded that environmental degradation which impairs the scheme of natural tourism

in Thailand should have various strategies such Communication and Education Theory, Stake holders' Involvement and Payment for Ecosystem Services to combat the environmental degradation of Tarutao National Park of Satun Province. Another study, interviewing Nangleang Market's stakeholders for a strategy to enhance its cultural tourist destination to generate more income, suggested Communication Theory, Stakeholders' Involvement, Civil State Empowerment, Social Network, a campaign by TAT, and Food Safety Standard as integrated strategy. For foreign countries, several research projects confirmed various strategies such as studies by Ioan, Pană and Buruiană (2009); Valadbigi and Ghobadi (2010); Antimova, Nawijn and Peeters (2012); Liu et al. (2012) and Sovacool (2012) as potential solutions to resolve environmental impacts by tourism. However, we need to determine which integrated strategies are the best suit for each area and environmental context to find solutions for each tourist destination. Thailand also need the right policy decision making to solve all the problems in any aspects.

Therefore, five strategies are raised as significance to decrease Thailand's natural tourism impacts according to these reasons.

1. Education and Communication is vital for Thai context to encourage environmental perception. It can help deliver conservative messages through many channels such as TV, radio spots, social networking or Facebook as stated in 3.4, or even leaflets and brochures via government and private sectors.

2. Stakeholders' Involvement is regarded as crucial to enhance cooperation in the local community in Thailand such a case of Rak Satun Group and Rak Lae Pa Fa Satun which these group of people act as inspectors and conservators in the area.

3. Payment for Ecosystem Services is advised as another method to seek for ecologically regional conservation in Thailand because it gains financial incentives to people who benefit from the area such as Lipe Island community who generates island fees for ecological maintenance.

4. Seven Greens by TAT is important to tourist destination of Thailand as it is launched to create Green Heart, Green Activity, Green Community, Green Logistic, Green Service, Green Attraction, and Green Plus to seek for environmental awareness.

Acknowledgement

The authors would like to thank Faculty of Liberal Art, Rajamangala University of Technology Phra Nakhon who supports time for creating this academic paper. Thank you Dr. Clive Graham of CQU, Australia for editing the paper and enlightening to shape it into a critical framework. This paper will also not be done without a generous support by Dr. Penpaksina Wichenwan of Suan Dusit University. Thanks all these fellows one more time.

Bibliography

- Antimova, R., Nawijn, J., & Peeters, P. (2012). The awareness attitude-gap in sustainable tourism: A theoretical perspective. *Tourism Review*, 67(3201), 7-16.
- Blanke, J. (n.d.).The travel & tourism competitiveness index: Assessing key factor driving the sector's development. *The world economic forum*, Retrieved from <http://www.weforum.org/pdf/tourism/Part2.pdf>.
- Brown, T. J., Ham, S. H., & Hughes, M. (2010). Picking up litter: an application to influence tourist behavior in protected area. *Journal of Sustainable Tourism*, 18(7), 879-900.
- Byrd, E. T., Bosley, H. E., & Dronberger, M. G. (2009). Comparison of stakeholders perception of tourism impact of eastern north carolina. *Tourism & Management*, 30(5), 693-703.
- Choibamrung, T. (2008). *Amazing trend and issue in Thai tourism marketing: A Sustainable path to sufficiency based national development 2*. Retrieved from <http://www.ttresearch.org.th>.
- Clarkson, M. B. E. (1998). *Introduction, The corporation and its stakeholders: Classic and contemporary reading*. Toronto: University of Toronto Press.
- David, K. Berlo. (1960). *El Proceso de la comunicacion*. New York: Holt Rinehart Winston.
- Dipietro, R. B., Crews, T. B., Gustafson, C., & Strick, S. (2012). The use of social networking sites in the restaurant industry: Best practices. *Journal of food service business research*, 1(15), 265-284.
- Drushel, B. E. (2013). HIV/AIDS, Social capital, and online social networks. *Journal of homosexuality*, 60(1), 1230-1249.
- Food and agriculture organisation of the united nations (2011). *Payments for ecosystem services and food security*. Rome: United Nation Publisher.
- Freeman, R. E. (1984). *Strategic management: A Stakeholder approach*. Boston: Pitman.
- Goelder, C. R., & Ritchie, J .R. B. (2003). *Tourism: principles, practices, philosophies*. Hoboken: John Wiley& Sons Inc.
- Gray, B. (1989). *Collaborating: finding common ground for multiparty problems*. San Francisco: Jossey Bass.
- Greathouse-Amador, L. (2005). Tourism: A facilitator of social awareness in an indigenous mexican community. *Review of policy research*, 22(5), 709- 720.
- Heineck, L. (n.d.). *Presidential food tour Bangkok, Thailand*. Retrieved from <http://www.sobremesainspain.com/2012/11/obama-presidential-food-our-Bangkok-> .
- Ioan, I., Pană, A., & Buruiană, V. (2009). Components of corporate environmental responsibility. *Metalurgia international*, 14(9), 43-46.

- Kelkit, A., Celik, S., & Esbah, H. (2010). Ecotourism potential of gallipoli peninsula historical national park. *Journal of coastal research*, 26(1), 562-568.
- Hungerford, H. R. (2010). Environmental education (EE) for the 21st century: Where have we been? Where are we now? Where are we headed?. *The journal of environmental education*, 41(1), 1-6.
- Kitisripanya, P. (2014). *A strategy to combat the environmental degradation of tarutao national park*. (Thesis). Central Queensland University.
- Kitisripanya, N., & Pongkonglad, S. (2018). A strategy to enhance nangleang market as a top tourist destination. *RMUTP research journal*, 1(2), 65-75.
- Lozano, C. A., & Vicente, M. M. (2010). University teaching of communication theory in europe and latin America. *Revista latina de comunicacion social*, 65(1), 255-265.
- Liu, W., Vogt, C. A., Luo, J., He, G., Frank, K. A., & Liu, J. (2012). Drivers and socioeconomic impacts of tourism participation in protected areas. *PLOS ONE*, 7(4), Retrieved from www.plosone.org.
- Management study guide. (n.d.). *Definition and features of strategy*. Retrieved from <https://www.managementstudyguide.com/strategy-definition.htm>
- Marion, J. L., & Reid, S. E. (2007). Minimising visitor impacts to protected areas: The efficacy of low impact education programs. *Journal of sustainable tourism*, 15(1), 5-27.
- McAfee, K., & Shapiro, E. N. (2010). Payments for ecosystem services in mexico: Nature, neoliberalism, social movements, and the state. *Annals of the Association of American Geographers*, 100(2), 579-599.
- McElroy, J. L., (2003). Tourism development in small islands across the world. *Geografiska annaler series B: Human geography*, 85(4), 231-242.
- McNeely, J. A., (2007). A zoological perspective on payments for ecosystem services. *Integrative zoology review*, 2(1), 68-78.
- McNeely, J. A., Kapoor-Vijay, P., Zhi, L., Olsvig-Whitaker, L., Sheikh, K. M. & Smith, A. T. (2009). Conservation biology in asia: The major policy challenges. *Conservation biology*, 23(6), 805-810.
- Ministry of Tourism and Sport. (n.d). *Thailand national tourism development plan 2012- 2016*. Retrieved from http://www.mots.go.th/ewt_dl_link.php?nid=4147
- Mowforth, M. & Munt, I. (2003). *Tourism and sustainability development and new tourism in the third world*. London: Routledge.
- Nelson, F., Foley, C., Foley, L. S., Leposo, A., Loure, E., Peterson, D., Peterson, M., Peyerson, T., Sachedina, H., & Williams, A. (2009). Payments for ecosystem services as a framework for community-based conservation in northern Tanzania. *Conservation biology*, 24(1), 78-85.

- Okello, M. M., & Yerian, S. (2009). Tourist satisfaction in relation to attractions and implications for conservation in protected areas of the northern circuit, Tanzania. *Journal of sustainable tourism*, 17(5), 605 - 625.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual review of sociology*, 24(1), 1- 24.
- Post Today. (2017). *Tourism awareness: As a way to solve garbage problems*. Retrieved from <http://www.posttoday.com>.
- Pukkalanun, N., Inkapatanakul, W., Piputsitee, C., & Chunkao, K. (2013). An analysis of the environmental vulnerability index of a small island: Lipe island, Kho sarai Sub-District, Mueang district, Satun province, Thailand. *Modern applied science*, 7(2), 33-39.
- Raksatun. (n.d). People network raksatun, Kreakai prachachon raksatu. Retrieved from <http://www.facebook.com/RakTaRuTao.RakPakBaRa>
- Sovacool, B. (2012). Environmental conservation problems and possible solutions in myanmar. *Contemporary southeast asia*, 34(2), 217-248.
- Sheehan, L., Brent, R. J. R., & Hudson, S. (2007). The destination promotion triad: Understanding asymmetric stakeholder interdependencies among the city, hotels, and DMO. *Journal of travel research*, 5(1), 64-74.
- Tanyaros, S. (2009). Impact of marine tourism on the recreational water Quality of muk island, Trang province, Southern Thailand. *Songklanakarin journal of science and technology*, 31(4), 367-372.
- The Global Environment Facility. (2010). *Payment for Ecosystem Services*. Retrieved from http://www.thegef.org/gef/sites/thegef.org/files/publication/PES_english.pdf
- Turner, R. (2013). *Travel & tourism economic impact 2013 Thailand*. London, UK: World Travel&TourisCouncil, Retrieved from http://www.wttc.org/site_media/uploads/downloads/thailand2013.pdf
- Tourism Authority of Thailand. (n.d.a). *How to be 7 greens?*. Retrieved from https://7greens.tourismthailand.org/en/index.php?mode=main_howto
- Tourism Authority of Thailand (n.d.b). *Where to go in Bangkok*, Retrieved from [thailand.html http://www.tourismthailand.org/Where-to-Go/Bangkok](http://www.tourismthailand.org/Where-to-Go/Bangkok)
- Trier, C., & Maiboroda, O. (2009).The green village project:A rural community's journey towards sustainability. *Local environment*, 14(8), 819-831.
- UNESCAP. (2009). *Innovative socio-economic policy for improving environmental performance: Payments for ecosystem services*. Bangkok: United Nation Publisher.
- Valadbigi, A., & Ghobadi, S. (2010). Sustainable development and environmental challenges. *European journal of social sciences*, 13(4), 542-549.

- Worachananant, S., Carter, R. W. B., Hockings, M., & Reopanichkul, P. (2008). Managing the impacts of SCUBA divers on Thailand's coral reefs. *Journal of sustainable tourism*, 16(6), 645-663.
- World Travel and Tourism Council. (2013a). *Economic impact 2012 southeast asia*. London: World travel and tourism council.
- World Travel and Tourism Council. (2013b). *Travel and tourism economic impact 2013 world*. Retrieved from http://www.wttc.org/site_media/uploads/downloads/world2013_1.pdf.
- World Tourism Organization. (2016a). Quick overview of key trend. *World tourism barometer*, 10(1), Retrieved from http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_barom16_04_july_excerpt_pdf.
- World Travel and Tourism Council. (2016b). *Travel and tourism economic impact 2016*. Retrieved from http://www.wttc.org/site_media/uploads/downloads/world2016_1.pdf.

Authors

Nonnaporn Kitisripanya and Siriporn Pongkonglad

Faculty of Liberal Art, Rajamangala University of Technology Phra Nakhon

e-mail: pornrungtip.k@rmutp.ac.th