

# The Assessment of the Natural Hot Spring Potential to Become the Spa Town of Krabi, Thailand

**Sarapee Chanatup**

*Faculty of Management Science, Suratthani Rajabhat University, Thailand*

Email: sarapee.cha@sru.ac.th

**Atcharawan Rattanaphan**

*Faculty of Management Science, Suratthani Rajabhat University, Thailand*

Email: atcharawan.rat@sru.ac.th

**Arus Kongrungchok**

*Faculty of Management Science, Suratthani Rajabhat University, Thailand*

Email: arus.kon@sru.ac.th

## **Article Info**

**Volume 83**

**Page Number: 1193- 1203**

**Publication Issue:**

**July-August 2020**

## **Abstract:**

The purpose of this research to the study of the potential of hot springs tourist attractions in Krabi province By analyzing the internal environment (strengths, weaknesses) and external environments (opportunities, threats). The research team collected data from in-depth interviews of 20 health and tourism related parties, including government, private and community sectors. The research team conducted strategic analysis consisting of the IFE matrix system and the Macao system. EFE matrix. The results show that, Internal and external factors (SWOT) found that the total weighted score of the internal factor environment (IFE) is equal to 2.20. The weighted score of the external factor environment table (EFE) is 2.40. When the weighted values of both tables are the process of determining the internal-external matrix position (ie matrix), the Y-axis is the score value of the IEF table score and the X-axis is the EFE table score value. When the points of the two axes intersect, it can be seen that the intersection points fall in part two. The strategy is constant, that is to say, that the organization will try to maintain the scope of their business. Not expanding rapidly, focusing on strengthening the business. To be able to be in the same competitive position and the same market share in the industry and able to control the risk that will occur. Therefore, it will be appropriate for those involved in the management of hot springs in Krabi province.

**Keywords:** *Medical Tourism, Hot Spring, Potential, Krabi*

## **Article History**

**Article Received:06 June 2020**

**Revised: 29 June 2020**

**Accepted: 14 July 2020**

**Publication: 25 July 2020**

## **Introduction**

The tourism industry is extremely important to the global economy (Jermittiparsert, 2019; Jermittiparsert & Chankoson, 2019). And with the continuous expansion of medical tourism (Subtavewung, Raksaskulwong and Tulyatid, 2005;

Fongtanakit, Somjai, Prasitdumrong, & Jermittiparsert, 2019), it has a market value as high as fourth. Second to cultural tourism, Food tourism, and ecotourism. it has earned approximately 15.6 of income from tourism as a whole (Chulalongkorn, University Institute, International Intellectual Coastal

Property, 2017). It is expected during the year. 2015-2020 the wellness economy will be higher than the global economy. Where health tourism is an important industry that generates income for many countries around the world. Seen from the year. In 2017, health tourism was valued at over 639.4 million dollars, with the constant growth of 6.5% from 2015-2017 (Global Wellness Institute, 2018). Also with the health industry, people all over the world are very interested in looking after their health. That may come from structural changes in the world population that are entering the aging society completely (Aged Society). Health Tourism is a form of tourism that tourists turning their attention to. Because health tourism includes medical tourism and wellness tourism. Which is a trip to a place where there is a systematic plan for medical treatment and is part of the rest health tourism, It has linked activities. Including the main activities such as health promotion activities And health rehabilitation activities that can generate income in many sections (Section), including beauty & anti-aging, healthy eating, nutrition, & weight loss, balancing the body - and the mind (Fitness & Mind-Body), preventive medicine and personalized medicine (Preventive & Personalized and Public Health), alternative medicine (Complementary & Alternative Medicine), wellness lifestyle real estate spa, thermal/mineral Springs and workplace wellness (global wellness institute, 2017. Asia is one of the top tourist destinations (Global Wellness Institute, 2017).

In the case of Thailand, health tourism is ranked 18th in the world and 5th in Asia (Kieanwatana, 2018). The medical tourism that is a part of health tourism, Thailand occupies the largest market share in the same region with relatively low healthcare costs. At the same, Thailand's medical service meets international standards. With more than 40 Joint Commission International standard (JCI) hospitals nationwide (Department of Health Service Support, 2016). The statistics of the number of

foreigners visiting the medical service in Thailand tend to increase every year. In accordance with the data of **Kasikorn Thai Research Center (2009)**. Estimate that the number of expatriates traveling to use health services from private hospitals in Thailand is 8.1 hundred thousand people. For tourists visiting Thailand and having health activities in a private hospital of 6.7 hundred thousand people. Because Thailand has various advantages, whether in terms of health services, personnel services, costs, local wisdom, and including natural attractions (Toonpirom, 2019). Therefore, the trend of the growth of the health tourism business in Thailand is likely to grow rapidly. The spa industry is an industry that is important for health tourism. Because the spa industry has a complex supply chain, from upstream businesses such as the herbal industry, and the spa products industry. Downstream businesses, such as industries that provide services, travel industry. And downstream businesses such as spa business establishments, tourism industry, and cleaning industry, etc. (Department of Health Service Support, 2017). Moreover, the strengths of health tourism destinations in Thailand come from natural resources as a base. With abundant forests, some sources are world heritage sites. And the use of national resources for health promotion such as hot springs, hot spring mineral water, salty springs, etc. The Thai spa industry is steadily growing. In 2015, the value of the Thai spa market is 32,000 million baht. The spa is ranked 1 in 5 of the activities that foreign tourists do in Thailand.

Krabi is a world-renowned tourist destination. With a diverse range of tourist destinations including the sea, the coast, the islands, the forests, the mountains, the streams, the way of life, the arts and culture, it is a destination for relaxation and appreciating the true nature of tourists visiting. There are also investors, both Thai and foreign, continuously entering into the service and tourism sector. The government, therefore, has the policy to develop Krabi

to be "Hot spring spa town" (Spa Town) of Thailand (Krabi Provincial Office, 2018). Therefore, to support Krabi's policy on the development of hot springs health tourism destinations and promote government strategies to create tourism revenue for the country. The researcher is interested in investigating and analyzing the potential of health tourism, a hot spring case study of Krabi. The information obtained from the research will be useful for government and private agencies involved in the development of hot springs in tourist destinations of Krabi province in the future.

### Literature review

**The concept of medical tourism** is defined as travel that involves the pursuit of making or maintaining or enhancing the health of individuals. The scope covers all services that provide holistic preventive care and improvement of health. Which are the choice and voluntary choice of service users who choose to use health promotion services while traveling abroad, tourists for health promotion may choose to use a variety of health promotion services, it can be separated as follows (Connell, 2006; Carrera and Bridges, 2006; Kim, Boo and Kim, 2011);

1. Physical health promotion services such as fitness, health food, spa, hot springs, beauty, cycling, running marathon, etc.
2. Mental health promotion services such as yoga, tai chi, etc.
3. Spiritual health promotion services such as meditation therapy.
4. Social health promotion services such as fitness social networks.
5. Emotional health promotion services such as Therapy for relaxation from stress etc.
6. Environmental health promotion services such as forest treatment.

The health tourism in Thailand is part of the application of traditional wisdom and science of health care as part of health services. As a result, Thai health

services are diverse and outstanding and are accepted. And acquaintances of health tourists all over the world. The strength of the Wellness Tourism business in Thailand is the application of a wide range of health resources. Such as spa businesses that use herbs or local resources to create exotic experiences. The business of meditation and yoga studios that apply knowledge of meditation following Buddhism principles.

### Concept about the potential of tourist attractions

The potential of the tourist destination is to show the readiness of the tourist attraction which facilitates development. Improvement or change, including the local attractions in supporting tourism activities, whether there is enough to attract tourists to decide to travel to that tourist destination or not (Rattanadilok na Phuket, 20 20: Chuamuangphan, 2019). The criteria for assessing the potential of tourist attractions have been applied to a variety of methods. 1) Criteria for assessing potential tourist attractions that cover area composition means consideration of the value of tourist destinations. With natural resources that have specific characteristics, or is unique, including the beauty, the distinctive feature, historical, the importance of religion and religion, atmosphere, natural landscape. and way of life. And also other factors that attract tourists to come to travel in the area such as the high season of the area. 2) next criteria for assessing the potential of tourist destinations that cover management components; ease of access, safety for tourism in the area / nearby, accessibility management, such as roads, electricity, water resources. Controlling the number of tourists in the tourism area not exceeding the carrying capacity. Management of tourism business Control in the area. 3) another criterion for assessing the potential of tourist destinations that cover activities and process

components. Moreover, to consider the diversity of ecotourism activities in the area, the opportunity to raise awareness And providing environmental education. And 4) the components of participation of local people (Sangkhakorn, 2016; Kieanwatana, 2018; Wongpratum, Naiyawat, Krongyut, Poomvichuech and Saokham, 2011).

## Methodology

This research is a qualitative study.

### 1. Population and samples

The population in the study was attendees who listen to opinions. To prepare a hot spring master plan for spa cities and hot spring tourism routes 2017 - 2027. Under the project, the cost of establishing guidelines for promoting knowledge on health tourism, by the office of the permanent secretary for Tourism and Sports, on 20 April 2017. Aonang sub-district, Aonang district, Krabi province, consisting of 20 persons, including 5 health tourism-related persons from government agencies, 5 private sectors, and 10 communities representative. through a purposive sampling method.

### 2. Data collection

2.1 Secondary information was ascertained through documents or document research, also collecting secondary data from books, academic papers, research papers, and academic articles related to health tourism and the potential for natural hot springs, both within the country and from abroad. Including academic data obtained through electronic searches or on various websites.

2.2 Primary data were ascertained through in-depth interviews with those involved in health tourism And informal participation in attending meetings, listening to opinions. To prepare a hot spring master plan for spa cities and hot spring tourism routes 2017 - 2027. Under the project, the cost of establishing guidelines for promoting knowledge on health tourism by the office of the Permanent Secretary for Tourism and Sports, on 20 April 2017.

Ao Nang Sub-district, Ao Nang District, Krabi Province.

### 3. Data analysis

The researcher conducted a strategic analysis consisting of the Internal Factor Environment (EFE) External Environment Environment (EFE) which many researchers use as a tool for analyzing the company's environment. (David, 2011; Kagohnnan, 2009) As follows;

1. The IFE (Internal Factor Environment) Matrix system requires that the list of factors that make health tourism For hot springs Krabi Success or failure by considering 10 to 20 factors, including strengths and weaknesses, by identifying the possibilities using percentages. Ratio and compare numbers Determine the weight range from 0.0 - 1.0 , with 0.0 without significance. 1.0 is very important. The determination of the weight of various factors is an important indicator of the relationship of various factors that will make it successful. With consideration to the key points of strengths And the weaknesses of factors affecting the tourism operations by communities After that, assign 1 to 4 sessions for each factor. By indicating the evaluation of Major Weakness = 1 and Minor Weakness = 2 Minor Strength = 3 and Major Strength = 4 The rating is based on the fundamentals of the company Different from step 2, which depends on the basis of the industry. The weight of each factor differs depending on the variable.

2. The total value of each variable weight is determined by the total weighted score of the organization when considering many factors which are included in the IFE matrix. IFE matrix. The total weighted score is between 1.0 and the highest 4.0. If the total weight = 2.5, then the average If less than 2.5, it means that the organization is in the weak position. If more than 2.5, it is in the strength position (Arabi, 2006). In the analysis of the EFE matrix (External factor environment matrix), there are principles

Analysis similar to the Matrix IFE, which is an analysis of opportunities. And threats of external factors affecting the company such as society, economy, politics, culture, technology and law, etc. Matrix EFE Total weight = 2.5 indicates that the average If less than 2.5 indicates that the organization is in the position of threats. If more than 2.5 means In the opportunity.

### Research Results

The results show that the strengths, weaknesses, opportunities, threats for hot springs Krabi province is as follows

**Table 1** The analysis strengths, weaknesses, opportunities, threats for hot springs Krabi province

<b>(STRENGTHS )</b>	<b>(WEAKNESS)</b>
<ul style="list-style-type: none"> <li>• The hot springs have enough water throughout the year. And contains minerals that are beneficial to health.</li> <li>• Located in a natural, quiet, and beautiful area.</li> <li>• The hot springs are in the famous province which is well-known to tourists.</li> <li>• There are tourist routes linked to other hot springs.</li> <li>• There is information on the use of hot springs in the health of people in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of marketing promotions such as creating a unique brand. It also lacks publicity for community shops.</li> <li>• Lack of facilities such as accommodation, standardized property.</li> <li>• Lack of creativity that embraces the principles of civilized architecture.</li> <li>• Lack of effective security systems.</li> <li>• Transportation is not convenient. Lack of standardized transportation services.</li> </ul>
<b>(OPPORTUNITIES)</b>	<b>(THREATS)</b>
<ul style="list-style-type: none"> <li>• Government policy that sees the importance of developing hot springs as a tourist attraction.</li> <li>• Preparation of the hot spring master plan for spa cities and hot spring tourism routes 2017 – 2027.</li> <li>• The popularity of health tourism is increasing.</li> <li>• The economic growth that affects the income of the population increases.</li> <li>• The society entering into elderly society.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of measures to motivate private investors to invest in a standard hot spring spa.</li> <li>• Lack of collaboration among those involved in the area.</li> <li>• Most hot spring sources are under the supervision of the local government organization. Which still lacks knowledge and capability in managing standards.</li> <li>• Most Thai tourists lack an understanding of the use of hot springs in health care. Along with tourism for recreation.</li> <li>• Most tourists lack awareness in following the rules. Regulations for use of services including the conservation of natural resources.</li> <li>• The local community lacked knowledge and understanding of doing business. Including product development following market demand.</li> </ul>

The analysis internal environment (IFE matrix) to use weighting. details as follows;

**Table 2** The analysis internal environment (IFE matrix)

(Internal Factor Environment)	(Weight)	(Rating)	(Weighted score)
<b>STRENGTHS</b>			
• The hot springs have enough water throughout the year. And contains minerals that are beneficial to health.	0.10	4	0.40
• Located in a natural, quiet, and beautiful area.	0.10	4	0.40
• The hot springs are in the famous province which is well-known to tourists.	0.10	4	0.40
• There are tourist routes linked to other hot springs.	0.10	3	0.30
• There is information on the use of hot springs in the health of people in the area	0.10	3	0.30
<b>WEAKNESS</b>			
• Lack of marketing promotions such as creating a unique brand. It also lacks publicity for community shops.	0.10	1	0.10
• Lack of facilities such as accommodation, standardized property.	0.10	1	0.10
• Lack of creativity that embraces the principles of civilized architecture.	0.05	1	0.05
• Lack of effective security systems.	0.10	1	0.10
• Transportation is not convenient. Lack of standardized transportation services.	0.05	1	0.05
<b>Total</b>	<b>1.00</b>		<b>2.20</b>

1= Major Weakness      2= Minor Weakness      3= Minor Strength      4= Major Strength

From table 2, found that The total weighted score of the Internal Factor Environment (IFE) is 2.20. The total weight is less than 2.5, indicating that the internal environment of the hot springs in Krabi province is in a weak position.

The analysis exintenal environment (EFE matrix) to use weighting. details as follows;

**Table 3** The analysis exnternal environment (EFE matrix)

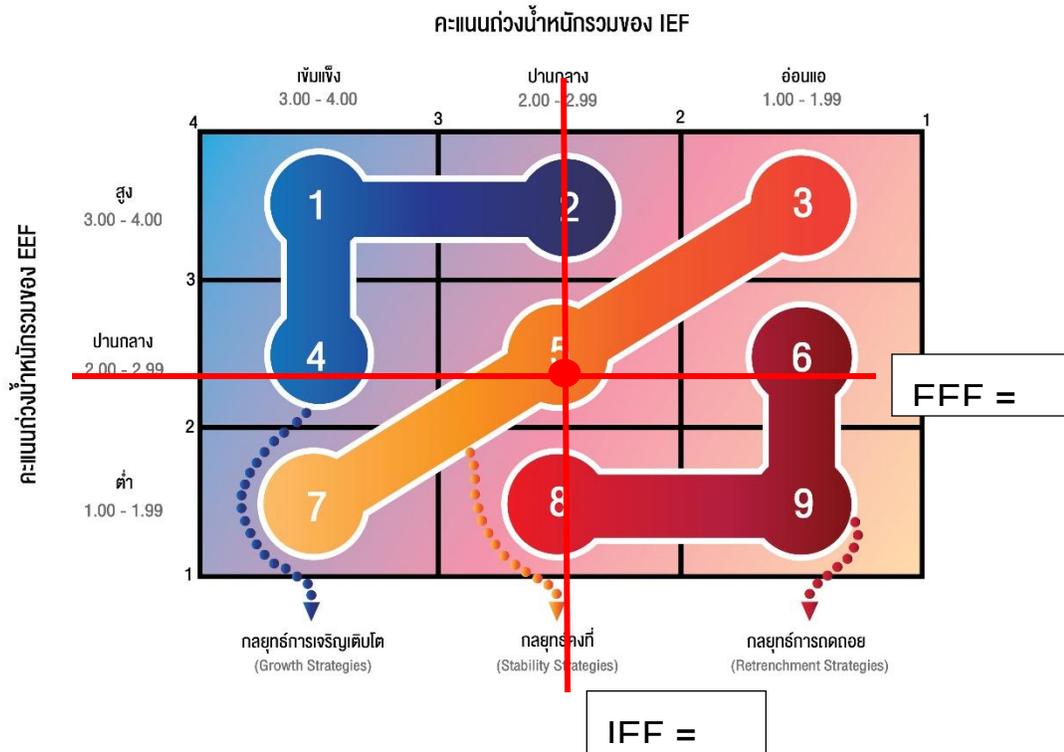
(External Factor Environment)	(Weight)	(Rating)	(Weighted score)
<b>OPPORTUNITIES</b>			
• Government policy that sees the importance of developing hot springs as a tourist attraction.	0.10	4	0.40
• Preparation of the hot spring master plan for spa cities and hot	0.10	4	0.40

spring tourism routes 2017 - 2027			
• The popularity of health tourism is increasing.	0.10	3	0.30
• The economic growth that affects the income of the population increases.	0.10	4	0.40
• The society entering into elderly society	0.10	4	0.40
<b>THREATS</b>			
• Lack of measures to motivate private investors to invest in a standard hot spring spa.	0.10	1	0.10
• Lack of collaboration among those involved in the area.	0.10	1	0.10
• Most hot spring sources are under the supervision of the local government organization. Which still lacks knowledge and capability in managing standards.	0.10	1	0.10
• Most Thai tourists lack an understanding of the use of hot springs in health care. Along with tourism for recreation.	0.10	1	0.10
• Most tourists lack awareness in following the rules. Regulations for use of services including the conservation of natural resources.	0.05	1	0.05
• The local community lacked knowledge and understanding of doing business. Including product development following market demand.	0.05	1	0.05
<b>Total</b>	<b>1.00</b>		<b>2.40</b>

1= threats 2= somewhat threats 3= somewhat opportunities 4= opportunities

From Table 4, it is found that the weighted score of the External Factor Environment (EFE) table is 2.40, which the total weight is less than 2.5, indicating that the external environment of hot springs in Krabi province has been The impact of threats over opportunities When the weighted values of both tables

are the process of determining the internal-external matrix position (ie matrix), the Y axis is the score value of the IEF table score and the X axis is the EFE table score value. When the points of the two axes intersect, you can see that the intersection points fall in part 2, which is a constant strategy.



**Discussion and Conclusion**

From the study of the potential of hot springs tourist attractions in Krabi province By analyzing the internal environment (strengths, weaknesses) and external environments (opportunities, threats) found that. The strengths of hot springs tourist spots in Krabi province are: the hot springs have enough water throughout the year, it contains minerals that are beneficial to health, and located in a natural area that is quiet and beautiful. The hot springs are in the famous province which is well-known to tourists. There are tourist routes that linked to other hot springs, the information has been found that hot springs are used for the health benefit of people in the area, etc. which is an advantage (resource advantage) of hot springs tourist attractions in Krabi province. That can attract tourists to travel to hot springs in the area. It is consistent with the research of Pengnorapat (2018) that studied the potential of cultural tourism in

Si Sa Ket Province, the study found that the strengths of Si Sa Ket Province have ancient Khmer civilization tourist destinations such as Don Thua Castle, Prasat Sa Kamphaeng Yai, Phu Fai Castle, Prasang Ku Castle, and Prasat Noi Wall. Besides, having natural attractions and agricultural tourism spots, which attracts the attention of both Thai and foreign tourists extremely well. And Tiapiboon (2014) studied the potential of ecotourism by communities of Ban Hua Hin, Wat Mae Tom Subdistrict, Bang Klam District, Songkhla Province, and found that the natural location, way of life, and culture of the local communities are the main factors that tourists consider first. The weaknesses of hot springs tourist spots in Krabi province include lack of marketing promotion such as creating a unique brand. Public relations, and community shops. lack of facilities such as accommodation, standardized property. Lack of creativity that embraces the principles of local architecture. Lack of effective security systems.

Inconvenient transportation, there is still lacking standardized transportation services and, etc. Which is considered a disadvantage of hot springs tourist attractions in Krabi And must find ways to solve these problems or defects. Most of which are facilities of tourist attractions. And marketing / public relations for tourist attractions to be well-known. As Srithong (2016) Studied the potential of health tourism management in all five provinces, namely Ratchaburi Province Kamphaeng Phet Province Ranong Province Chiang Rai Province Chiang Mai province and found that, the weaknesses that occur with health tourism in five provinces are the facilities in terms of the hot springs source, including a private shower. Besides, there is not enough seating for tourists and not enough cleanliness of the hot springs and the surrounding area. these factors will make tourists feel uncomfortable while traveling and may not want to travel to the area. Moreover, Rattanadilok, Phuket (2020) mentioned the potential to reach various tourist destinations, which is an important factor in assessing the readiness of tourist destinations, especially the transportation routes that reach the tourist attractions. And facilities in tourist attractions that provide services to tourists.

The opportunity of hot springs tourist attractions in Krabi province is the government policy that sees the importance of developing hot springs to be a tourist destination. As well as, the popularity of health tourism is increasing, economic growth that affects the income of the population increases, and the society entering into the elderly society. Which can be considered as external factors that the organization can gain an advantage over competitors. Similar to Weerakit, Chaiyasain, Aksornpairoj, and Sonpiam (2019) study, it is found that Phuket's medical tourism development approach to gain a competitive advantage partly from government agencies and private agencies that come to support as a medical tourism center.

The threats of hot springs in Krabi are a lack of measures to motivate private investors to invest in a standard hot spring spa. The lack of collaboration among those involved in the area. Most hot spring sources are under the supervision of the local government organization. Which still lacks knowledge and capability in managing standards. Most Thai tourists lack an understanding of the use of hot springs in health care. Along with tourism for recreation. Most tourists lack awareness in following the rules and regulations for using services, as well as the conservation of natural resources. Moreover, the local community lacked knowledge and understanding of doing business. Including product development following market demand.

Internal and external factors (SWOT) found that the total weighted score of the internal factor environment (IFE) is equal to 2.20. The weighted score of the external factor environment table (EFE) is 2.40. When the weighted values of both tables are the process of determining the internal-external matrix position (ie matrix), the Y-axis is the score value of the IEF table score and the X-axis is the EFE table score value. When the points of the two axes intersect, it can be seen that the intersection points fall in part two. The strategy is constant, that is to say, that the organization will try to maintain the scope of their business. Not expanding rapidly, focusing on strengthening the business. To be able to be in the same competitive position and the same market share in the industry and able to control the risk that will occur. Therefore, it will be appropriate for those involved in the management of hot springs in Krabi province to follow the strategies below,

1. Pause or proceed with caution Strategy after the business expands. Resulting in a lack of resources or environmental changes that affect the business. Such as economic conditions, government policies, laws, or regulations. Consumer tastes change businesses should, therefore, use the Pause policy.

2. Waiting and watching strategy (Wait-and-see Strategy) is to watch carefully. Not rashly to grow and closely monitor the situation changes. For example, in the case of tourism businesses in southern Thailand. Which has been continuously negatively affected, starting from political unrest terrorism, epidemic, natural disaster, also the oil crisis. Which shaken the confidence of both tourists and investors greatly. Reviving and expanding investment again must be very careful. Therefore, leaders should focus on waiting to see and assess the impact of such situations. How it will affect the short term and how long will the impact be. To call the confidence of tourists

3. Profit Strategy, the business must-try to reduce expenses to make the business more profitable.

## References

1. Arabi, M. 2006. **Manual of strategic planning**. Cultural Research Office: Tehran.
2. Carrera, P.M., and Bridges, J. F. P. 2006. "Globalization and healthcare: understanding health and medical tourism". **Expert Review of Pharmacoeconomics and Outcomes Research**, 6 (4): 447-454
3. Chuamuangphan, N. 2019. "Participation Patterns on Hot Spring Sites Tourism Management in Western Thailand". **Journal of Management Science Nakhon Pathom Rajabhat University**. 6 (1): 32-48.
4. Chulalongkorn University Intellectual Property Institute. 2017. **Trend analysis report of affluent medical and wellness tourism industry**. Retrieved September 13, 2019, from [https://www.ipthailand.go.th/images/3534/web\\_01052018/Report\\_CHU/8\\_Well-being\\_06.12.2017\\_CHU.pdf](https://www.ipthailand.go.th/images/3534/web_01052018/Report_CHU/8_Well-being_06.12.2017_CHU.pdf)
5. Connell, J. 2006. "Medical tourism: sea, sun, sand and surgery". **Tourism Management** 27 (6): 1093-1100.
6. David, F.R. 2011. **Strategic management: Concepts and Cases**. 13th ed. New Jersey: Prentice Hall.
7. Department of Health Service Support. (2016). **Strategies for developing Thailand as an international health center (MEDICAL HUB) (2017 - 2026)**. Retrived 5 June 2020. From <http://203.157.7.120/fileupload/2560-102.pdf>.
8. Department of Health Service Support. 2017. **Guidelines for the establishment of health establishments**. Bangkok: Genesis MediaCom Co.,Ltd.
9. Fongtanakit, R., Somjai, S., Prasitdumrong, A., & Jermisittiparsert, K. (2019). The Determinants of the Medical Tourism Supply Chain of Thailand. *International Journal of Supply Chain Management*, 8(6), 291-300.
10. Global Wellness Institute. 2017. **Global wellness economy monitor 2017**. Retrieved September 13, 2019, from [https://static1.squarespace.com/static/4306a8ee4b07ea66ea32cc0/t/58862a472994ca37b8416c61/1485187660666/GWI\\_WellnessEconomyMonitor2017\\_FINALweb.pdf](https://static1.squarespace.com/static/4306a8ee4b07ea66ea32cc0/t/58862a472994ca37b8416c61/1485187660666/GWI_WellnessEconomyMonitor2017_FINALweb.pdf)
11. Global Wellness Institute. 2018. **Global wellness economy monitor-October 2018**. Retrieved September 13, 2019, from [https://globalwellnessinstitute.org/wp-content/uploads/2019/04/GWIWellnessEconomyMonitor2018\\_042019.pdf](https://globalwellnessinstitute.org/wp-content/uploads/2019/04/GWIWellnessEconomyMonitor2018_042019.pdf)
12. Jermisittiparsert, K. (2019). Climate Change, Growth Determinants and Tourism Industry: Time Series Analysis from Malaysia. In *Proceedings of the 2nd International Conference on Social Sciences*. Gent:

- European Alliance for Innovation. DOI: 10.4108/eai.5-11-2019.2292498.
13. Jernsittiparsert, K. & Chankoson, T. (2019). Behavior of Tourism Industry under the Situation of Environmental Threats and Carbon Emission: Time Series Analysis from Thailand. *International Journal of Energy Economics and Policy*, 9(6), 366-372. DOI: 10.32479/ijee.8365.
  14. Kagohnnan, N. 2009. **Strategic management**. Bangkok : SE-ED.
  15. Kieanwatana, K. 2018 . “The Early Adult Chinese’s Attitude towards Tourism Image of Thailand Singapore and Malaysia”. **Journal of Thai Hospitality & Tourism** 13 (2): 16-24.
  16. Kim, Y. H., Boo, C., and Kim, M. 2011. “A Case Study of Health Tourism in the Jeju Province, South Korea”. **Hospitality Review**, 29 (1), 4-15.
  17. Krabi Provincial Office. (2018. **Strategic Plan of Krabi Province 2018 – 2022**. Retrieved September 13, 2019, from <http://www.krabi.doae.go.th/1.pages/>
  18. Pengnorapat, U. 2018. “The Strategies for the Development of the Cultural Tourism Potentiality in Sisaket Province”. **Journal of Thai Hospitality and Tourism**, 12 (2): 28-43.
  19. Rattanadilok na Phuket, K. 2020. **An Ealuation of the readiness of hot spring, amphone Khlong Thom, Changwat Krabi tobe developed as a prototype of hot spring-health tourism**. Masters’ Thesis, Prince of Songkla University, Songkla. [In Thai].
  20. Sangkakorn, K. 2016. **The study to opportunities And the competitiveness of the business of Long Stay in the upper northern region** Chiang Mai: Social Research Institute, Chiang Mai University.
  21. Srithong, U. 2016. “Hot Spring (Onsen) : An Innovation of Tourism Management for Health and Therapy by Community’s Participation”. **Journal of MCU Social Science Review**, 5 (2): 179-192.
  22. Subtavewung, P., Raksaskulwong, M. and Tulyatid, J. 2005. The Characteristic and Classification of Hot Springs in Thailand. **Proceedings World Geothermal Congress 2005 Antalya, Turkey, 24-29 April 2005**.
  23. Tiapiboon, P. 2014. **Potential of community based ecotourism at Hua-Noun Wat community, Mae-tom sub - district, Bangkum district, Songkla Province**. Masters’ Thesis, Prince of Songkla University. Songkla
  24. Toonpirom, V. 2019. **Wellness Tourism New Strategies for Tourism**. Retrieved 10 March2019. from <http://gotomanager.com/content/wellness-tourism-New Strategies for Tourism>.
  25. Weerakit, N., Chaiyasain, C., Aksornpairoj, P. and Sonpiam, S. 2019. “The Development Guidelines of Medical Tourism to Upgrade Phuket to be an International Medical Hub.” **Journal of International and Thai Tourism**. 15 (2): 35-57.
  26. Wongpratun, N., Naiyawat, M., Krongyut, K., Poomvichuech, D., and Saokham, P. 2011. “The Potential Assessment for Promoting Agro - Tourism at Wawee Village, Chiang Rai Province, Thailand.” **Dusit Thani College Journal**, 12 (2): 132-150.