

## **THE POTENTIAL OF TOURIST ATTRACTIONS AND THE OPTIMUM TRAVEL ROUTES IN CHAINAT PROVINCE**

Kulapramote Prathumchai<sup>1</sup>, Kittichat Phuengroop<sup>2</sup>, Narawit Kaewpentong<sup>3</sup>,  
Punfun Chabubtrong<sup>4</sup>, Thapthai Chaithong<sup>5</sup>

<sup>1</sup>Department of Geography, Faculty of Social Science, Kasetsart University, 50 Ngam Wong Wan Rd, Lat Yao Chatuchak Bangkok 10900, Thailand, Email: kulapramote.p@gmail.com

<sup>2</sup> Centre for Agricultural Information, Office of Agricultural Economics, Phaholyothin Rd, Lat Yao Chatuchak Bangkok 10900, Thailand, Email: kittichat.ph@gmail.com

<sup>3</sup>Centre for Agricultural Information, Office of Agricultural Economics, Phaholyothin Rd, Lat Yao Chatuchak Bangkok 10900, Thailand, Email: Narawit2541@gmail.com

<sup>4</sup>Department of Geography, Faculty of Social Science, Kasetsart University, 50 Ngam Wong Wan Rd, Lat Yao Chatuchak Bangkok 10900, Thailand, Email: punfun.c2541@gmail.com

<sup>5</sup>Department of Geography, Faculty of Social Science, Kasetsart University, 50 Ngam Wong Wan Rd, Lat Yao Chatuchak Bangkok 10900, Thailand, Email: thapthai.c@gmail.com

**KEYWORDS:** Travel route, Tourist, Network Analysis, GIS, Chainat

**ABSTRACT:** In 2020, the Tourism Authority of Thailand (TAT) promoted the minor city as a new tourist destination. Chainat is one target of this campaign. Therefore, this research aimed to propose the optimum travel routes and evaluate the potential of the Chainat as a tourist province. This study implemented the interview, survey, and network analysis techniques. As a result, nine places have the potential for recreation tourism, thirteen sites have the potential for historical tourism, and two sites have the potential for cultural tourism. The study applied network analysis in GIS to design the tourist programs' optimum routes. The one-day trip program consists of the 'Lucky worship route' and the 'Country life relaxing route', visiting seven and six places. Another optimum route design was the one-night trip program is 'Various happy route' program, to fulfill the various journeys in eight districts, including thirteen sites. The main criteria of attractions and routes were the potential and travel time. This research would support the tourism promotion plan of TAT's campaign. Also, it could be a tourist guideline and develop the economy of Chainat as a famous tourist province.

### **1. INTRODUCTION**

Tourism within Thailand found that most tourists prefer to go to the main cities in 22 provinces. Therefore, their income from the tourism section would not be proper distribution. When comparing the income ratio, the income of the primary city was 90%, and the secondary city was 10%. The number of tourists in the main cities was 70%, and in the secondary cities, it was 30%. Therefore, the Tourism Authority of Thailand's Plan promotes tourism in the domestic market. To stimulate the growth of tourists in a balanced way by distributing more tourists to secondary cities, Reduce the concentration of tourists and income that is usually in popular main cities (Tourism Authority of Thailand, 2020)

Chainat Province, located in the upper central region of the Chao Phraya River Basin, is a province with a long history. There are various types of tourist attractions. Many of them are very important and exciting. Both historical culture and way of life and recreation, such as Mahathat temple, the cultural community of Noen Kham weaving site, Chainat Bird Park, etc., but tourism in Chainat often has problems. However, Chainat Province is a "City of the Passage" and "Secondary City" and is usually unknown to tourists. Thus, there are few tourists and tourism income (Puriwat Det Um et al., 2019).

Many tourist attractions still lack potential and development. A significant cause is that the management capabilities of relevant agencies, both the public, private, and community sectors, are still limited in many aspects, including knowledge management and tourism management to attract tourists (Woranart Duangudom, 2014).

Therefore, this research project assesses the potential of various tourist attractions in Chainat Province to create a database for relevant agencies used as a guideline for planning and developing tourism and design a map showing the travel route in Chainat Province. Moreover, to display information on modern and exciting tourist routes. This

research may be a guideline for relevant agencies to use the information for tourism development planning with the recommended travel routes as well as applied in other provinces.

## **2. OBJECTIVES**

The study aims to answer the question of the potential level of tourist attractions in Chainat province and how the optimum travel routes which based on the activities, routes, travel time, and a variety of tourist attractions. Therefore, this research has two main aims: to evaluate the potential of tourist attractions and to design the optimum travel route maps in Chainat Province.

## **3. MATERIALS AND METHODOLOGY**

The scope of the research project on the spatial boundaries covers the area of Chainat province. It has a total area of 2,469.746 square kilometers, comprising eight districts.

This research has a conceptual framework for qualitative research. The field surveying was conducted to observe the tourist infrastructure, facilities, and environment, including a structural interview. Road network analysis was implemented.

### **3.1) Information and data sources**

The type of information was primary data consisting of data for the potential of tourist attractions evaluation; for instance, facilities, tourism activities, operation hours, travel time, and the site's location. The secondary data consists of a list of tourist attractions, road networks, and administrative boundaries that were acquired from TAT, tourist websites, and open public sources.

### **3.2) Data collection methods**

This research used the data of tourist attractions in 2021. There are two groups of targets for research:

1) recreational, historical, and cultural tourist attractions 2) the tourist place officer. A structured interview form was used to collect data on the potential of three types of tourist attractions as follows:

Three potential types to assess tourist attractions are recreational, historical, and cultural attractions. In addition, all three potential types were considered from three aspects. First is Attractiveness, from the event technology, accessibility, and location. The availability of facilities is the second point. The third aspect is the management from safety management, environment, information services, and community participation. Besides the attractiveness aspect of the historical and cultural tourist sites, activities, archeological sites, evidence, local wisdom, and traditions were considered.

In summary, the tourist attractions in Chainat were grouped by type of tourist attraction for recreation, historical and cultural sites with a total of twenty-five places, and twenty-five officers in charge of each attraction were interviewed for this study.

### **3.3 Data analysis methods**

The potential analysis was operated with descriptive statistics by rating and calculating the weight of the factor, which refers to the criteria of the Department of Tourism, TAT. The proportion of scores, Attractiveness is 40 points, Facility section is 20 points, and Management 40 points, total 100 points of tourist attractions in Chainat province. The potential was divided into five levels: Very High level was more than 81 points, High level scored 71 - 80 points, Moderate level scored 61 - 70 points, Low level scored 51-60 points, and Very Low level scored less than 51 points.

Map design for the optimum travel routes by data analysis using the information from field surveys, including travel routes, tourism activities, Travel time, and tourist attractions. The tourist sites with potential were selected for the recommended travel route with the road maps by applying the network analysis tool in a GIS program.

## 4. RESULTS AND DISCUSSION

### The potential evaluation of tourist attractions

Assessment of the tourist places potential consists of Attractiveness, Facilities, and Management. These tourist attractions in Chainat were collected in this study, recreational, historical, and cultural attractions. The evaluation results are as follows:

#### 4.1 Recreational tourist attractions

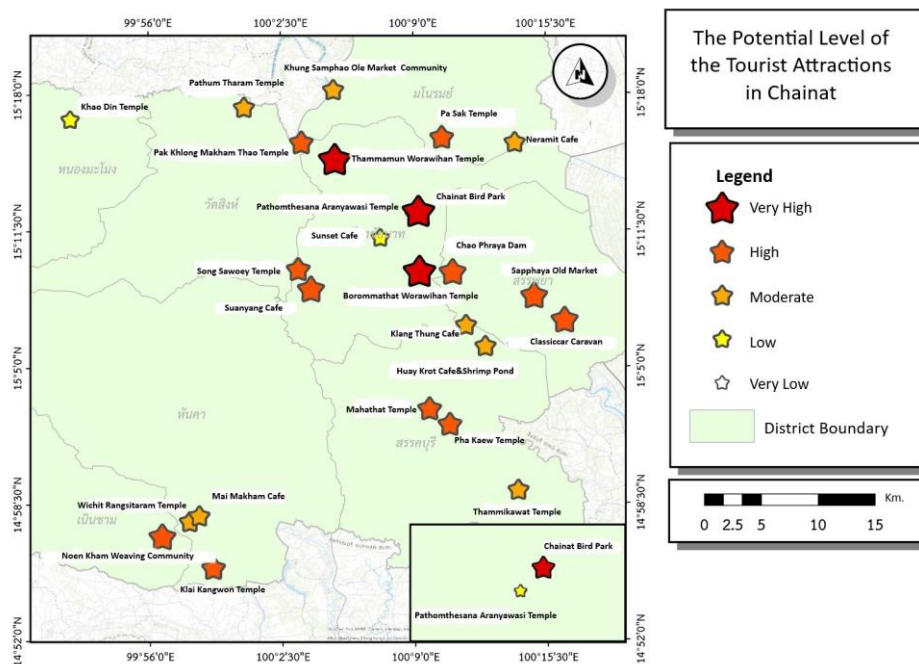
Nine recreational tourist attractions found that one of them had very high potential, namely: Chainat Bird Park. Three places, Chao Phraya Dam, Classic Caravan, and Rubber mid-field plantation had high potential levels. There were four sites of moderate potential: Klang-Thung Coffee, Huay-Krot Shrimp Pond, and Mai-Makham café. The Sunset Cafe was the only one with low potential, while no tourist sites fell under a very low potential attraction. Among all potential scores, it was found that most tourist attractions scored less in the attractiveness aspect.

#### 4.2 Historical tourist attractions

Of thirteen historical tourist sites, two places had very high potential: Thammamun Worawihan temple and Phra Borommathat Worawihan temple. There were six temples on high level: Mahathat, Pak Khlong Makham Thao, Song Sawoey, Klai Kangwon, Phra Kaew, and Pa Sak temple. There were three places at a low potential: Pathum Tharam, Wichit Rangsitaram, and Thammikawat temple. Two low potential temples were Pathomthesana Aranyawasi and Khao Din temple. No very low potential tourist site was found. From the potential score, most tourist attractions had low attractiveness and management.

#### 4.3 Cultural tourist attractions

Two of the three cultural tourist communities had high potential, namely Noen Kham Weaving and Sappaya Old Market Community. One low potential was Khung Samphao Old Market Community. This study did not find the tourist attractions in very high, low, and very low potential levels. The potential scores describe that most of the tourist attractions had low score in attractiveness and management. Of the three types of tourist attractions in Chainat province, a total of twenty-five sites found three with very high potential, eleven high level, eight moderate, and three low level potential sites. As a result, the less score was in attractiveness and management. In addition, most of the tourist attractions with high potential scores tend to be located in the Eastern province of the Mueang district. The map of tourist potential is displayed in Figure 1.



**Figure 1** Location of tourist attractions in Chainat Province according to the potential level

## 2. Travel routes Map

The travel route maps were designed considering tourism activities, roads, travel time, and various tourist attractions using network analysis to create the optimum routes. Three optimum routes program were defined as follows:

### 2.1 Lucky worship route program

This route is a one-day trip that consists of seven attractions of moderate to very high potential from all categories: historical, cultural, and recreational. There are two recommended restaurants. This route focuses on tourist attractions with activities to pay homage to monks and worship the sacred for blessings and fortune.

The first point starts at 8:30 a.m. at the Sapphaya Old Market Community, having breakfast at an ancient noodle restaurant, wandering around the market, the old police station, and Sappaya Watthanaram temple. Then travel to the second point, Chao Phraya Dam, to see the view of the dam and the Chao Phraya River and buy products at the Chao Phraya Land market. The third point is the Pa-Sak temple, paying respects to a master monk (Luang Phor Khalid) and worshipping sacred objects. Then go to the fourth point, Laab Ped Chainat restaurant, for lunch. The fifth point is at Thammamoon temple, respecting a master monk (Luang Pho Thammachak), the pair of Buddha images in Chainat. The sixth point, Pak Khlong Makhham Thao temple, is to respect Luang Pu Suk and worship sacred objects. The seventh point is at Suanyang Café in the rice field to relax with drinks and watch the rice fields and rubber plantations. Then travel to the eighth points, Song Savoey temple, pay homage to monks, and ask for fortune from Som Chun. The Final stop is for dinner at Ruen Khanthalai restaurant at 6.25 p.m. The total travel time of the whole trip is 10 hours 55 minutes, while the total travel time is 1 hour 25 minutes, and the total distance is 99 kilometers. Figure 2 shows the route map of the Lucky worship route.

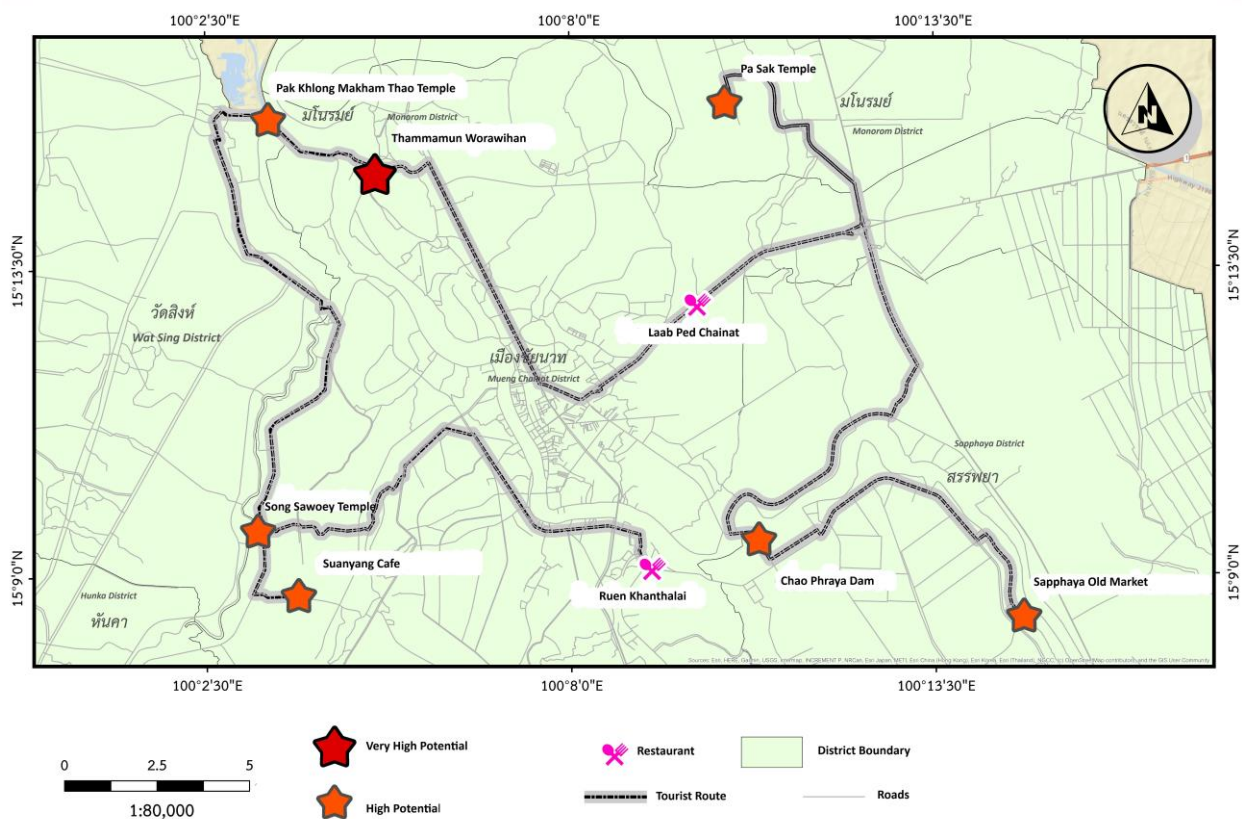


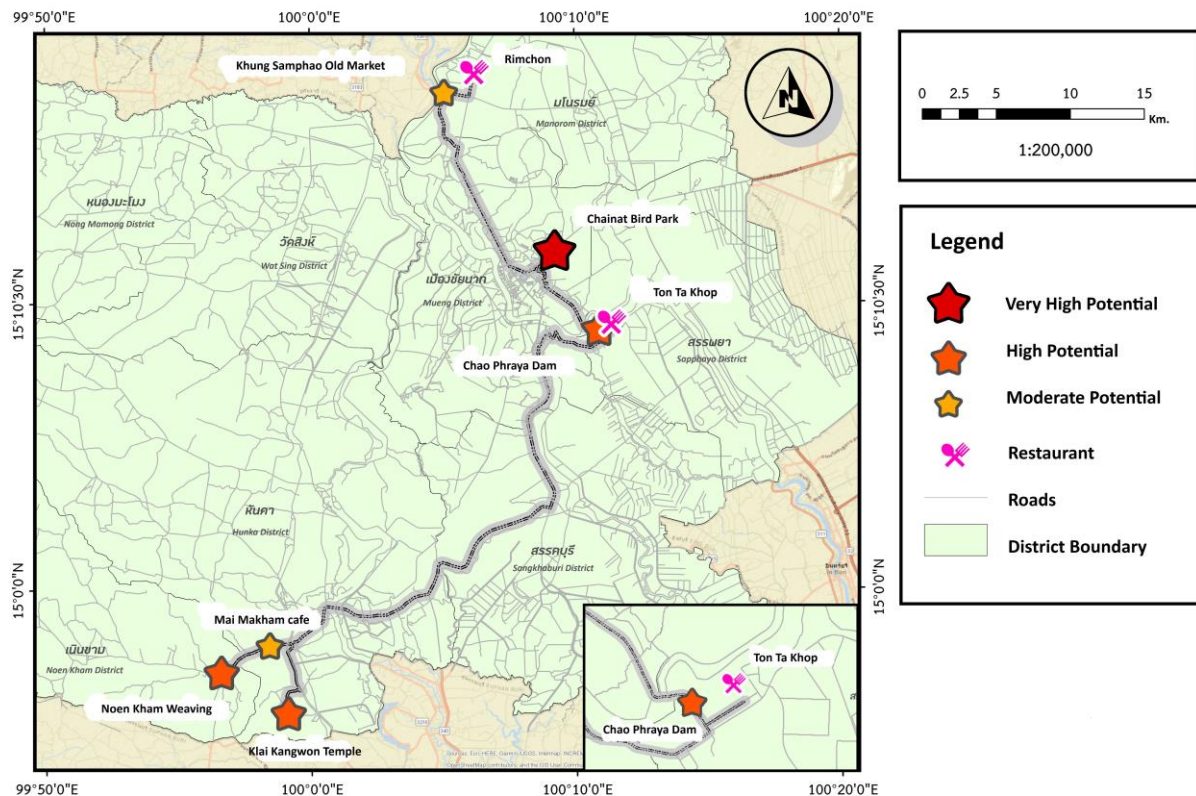
Figure 2 One-day trip: Lucky worship route

## 2.2 Country life relaxing route program

This route is a one-day excursion comprising six attractions with moderate to very high potential in three categories: recreational, cultural, and historical. One-day vacation covered the experience way of life of Chainat people. This route focused on leisure activities, visiting recreational attractions, and visiting cultural communities, including two recommended restaurants.

This route starts at the first stop at 8:30 a.m. at the Mai Makham café to have breakfast and relax with the rice fields scenery. The second point is the Noen Kham weaving community, which sees weaving, visits villages and museums, and shops for the community products. The third point is the Klai Kangwon temple, which pays homage to the Buddha's footprint and feeds animals such as peacocks, deer, and fish. The fourth place is for lunch at Ton Ta Khop restaurant, then travel to the fifth point at Chao Phraya Dam to view the scenery and buy souvenirs at the Chao Phraya Land Market.

The sixth point was at Chainat Bird Park to see various birds, fish museum, Egg Museum, Planetarium, and Space Water Park. The seventh point is Khung Samphao Old Market Community for walking around and shopping the local goods. Then travel to the last stop at Rimchon restaurant for dinner at 18.39. The total time spent on the trip is 11 hours 9 minutes, with total travel time being 1 hour 24 minutes and total distance being 98.3 kilometers. Figure 3 display the map of the One-day route map.



**Figure 3** One-day trip: Country life relaxing route program

## 2.3 Various happy route program

The one-night trip program, this route is a two-day excursion and one-night overnight trip, consisting of a total of thirteen attractions, with low to very high potential from three categories: recreational, cultural, and historical sites. There are five recommended restaurants and one recommended accommodation by this route. The program aims at tourist attractions with various activities. It plans to all eight districts of Chainat province, namely, Mueang Chainat, Sappaya, Sankhaburi, Sing temple, Manorom, Hankha, Nong Ma Mong, and Noen Kham.

First-day route Start at 8:30 a.m. at the Mai Makham Cafe for breakfast and relax and watch the rice fields. Then go to the second point, the Noen Kham weaving community, see weaving, visit villages and museums, and shop for community products. The third point, Klai Kangwon Temple, is to pay homage to the Buddha image and feed food to animals such as peacocks, deer, and fish.

The fourth point is at Krua Nan-In the restaurant for Lunch, then travel to the fifth point at Mahathat temple to pay respect to monks and see important ancient sites. The sixth point is at a coffee shop in the paddy field, take a break, have a drink, and relax with the rice field scenery. Then travel to the seventh point at Sappaya Old Market Community for shopping, visiting the old police station, and visiting Sappaya Watthanaram temple. At the eighth point, Chao Phraya Phraya Dam, take a break to enjoy the scenery and buy souvenirs at the Chao Phraya Land Market. Then go to the ninth point for dinner at Samrub Kub Khao restaurant, then travel to the tenth point of Chao Phraya Tara Riverside for a rest at 7:31 p.m.

On the second day route, the first stop starts at 8:00 a.m. at the Chao Phraya Tara Riverside, then travel to have breakfast at the second point, Khao Kaeng Kwan Ruen restaurant. The third point is at Phra Borommathat Worawihan temple to see ancient sites and the Chainat Muni National Museum. The fourth point is at Chainat Bird Park to see various birds, freshwater fish, and Bird's Egg Museum, Planetarium, and Space Water Park. The fifth point is at Lap Ped Chainat restaurant for Lunch. The sixth point is at Thammamoon temple to pay respect to the master monk, Luang Phor Thammachak, and see ancient sites. Then travel to pay respect to the master monk, Luang Pu Suk, and worship sacred objects at the seventh point of Pak Khleng Makham Tao temple. The eighth point is to respect the Buddha image at Khao Din Temple and see a pagoda, Phra That Chedi. The ninth is at Khung Samphao Old Market Community; walk around the market, buy local products, and take photos of the street art. The last stop is at Rimchon restaurant for dinner at 18.43. In summary, this trip's total travel applied time of 22 hours 44 minutes. The total travel time is 2 hours 44 minutes, and the total distance is 194 kilometers; the route map displayed in Figure 4.

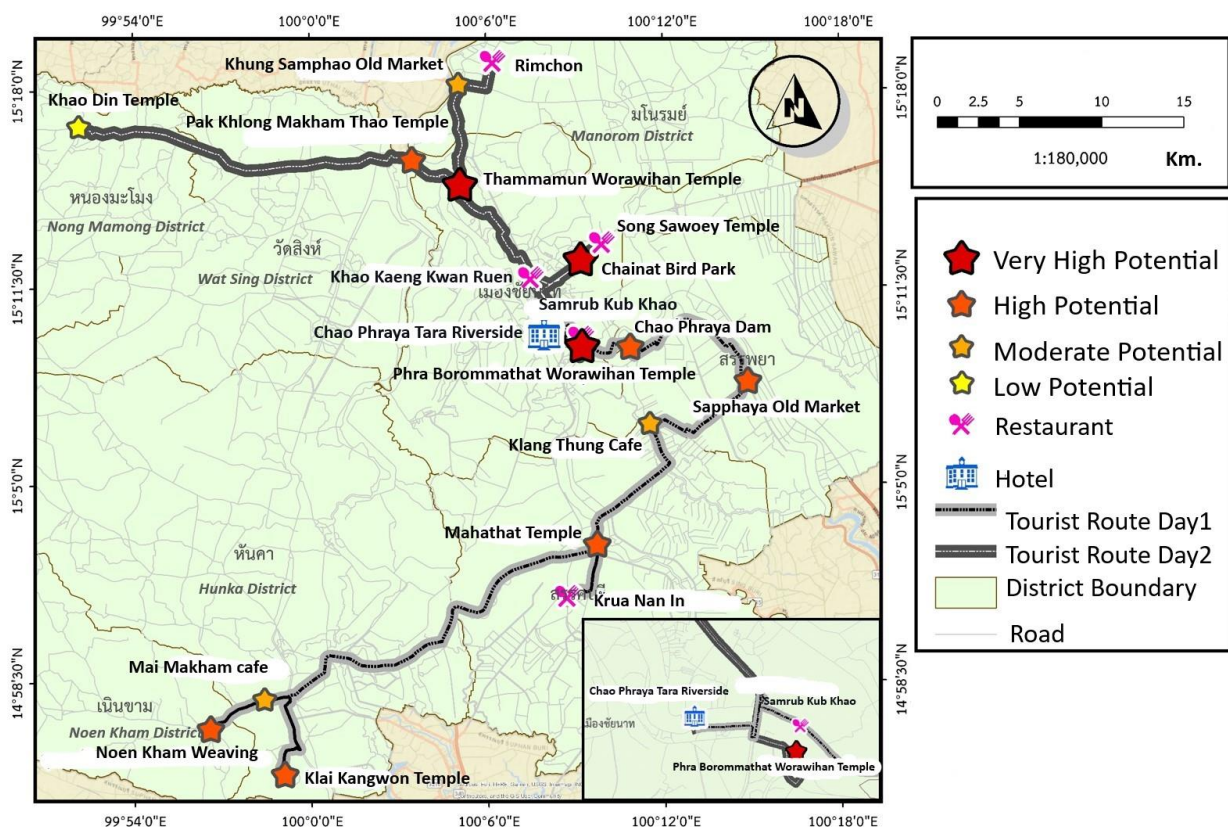


Figure 4 Map of travel route for the one-night program

## 6. CONCLUSIONS

### 6.1 The evaluation of attractiveness, facilities, and management potential

Most of the tourist attractions in Chainat have a high level of potential. Most tourist places were at a very high level. The moderate and low levels were found in at least areas, and very low level potential attractions were not found. Most of the tourist attractions with high potential scores are already well-known main attractions, such as Chainat Bird Park and Thammamun Worawihan temple. It locates in the capital of the district (Mueang district). Most tourist places that have lower score potential was found that they have lack development in various fields, including tourism activities, facilities, and management. These are places such as Wat Khao Din, located in Nong Ma Mong District, which is in a relatively remote district, and others primarily found in the un-well-known tourist attractions.

### 6.2. The travel routes Maps

This research applied network analysis for three tourist routes preparation, namely 1) Lucky worship route; the route to pay respect to the Buddha image and worship the sacred enhance luck (one-day trip), 2) Country life relaxing route; a vacation experience the way of life of Chainat people (one-day trip), and 3) Various happy route; the program to fulfill various journey visit eight districts in 2 days (one-night trip). Every route has a variety of attractions. Restaurants are recommended for each day and accommodation on the overnight route. Each route has a different focus on tourism activities. All programs occupied the main routes and set the optimum travel time based on the route maps and most accessible access.

### Recommendations

As the research results, it was found that many tourists had very different potential. Therefore, tourism activities should be enhanced. In order to upgrade the potential of various tourist attractions, infrastructure development should be concerned, including the development of electricity, water supply, roads, and various facilities such as parking, restrooms, and facilities for the disabled. Moreover, they would effectively enhance security management and environmental concern.

The recommendations for future study could be increasing the number of contributors. It could obtain more diverse data and areas. More factors would be considered in travel planning, such as expenses to plan a more diverse travel route and developing a website system to disseminate information about tourist attractions or travel routes for tourists and interested people to know easier.

### Reference:

Boonlert, C., 2005. Thailand's Timeless Business Tourism Industry. Bangkok: C.P. Book Standard Publishing.

Department of Tourism, 2014. Tourism Quality Standards Measurement and Assessment Guide. Bangkok: Office of Printing Works of the War Veterans Organization under the royal patronage

Department of Tourism Planning and Management for Environmental Conservation, Srinakharinwirot University.

Dariya, B., Aimorn, Al., 2018. A study of the potential of community tourist attractions and nature to develop tourism routes

Krit, W.,et al. 2019. Quality Assessment of Historical, Art, and Cultural Tourist Sites and Tourism Route Development in Ubon Ratchathani Province. Research articles Department of Geography, Kasetsart University.

Kulwara, S., 2005. Travel routes. Bangkok: Pearson Education Indochina.

Prasit, K.,et.al.. 2003. Executive Summary Report A sub-research project on the study and survey of tourism routes in the Northeast. (Copy document).

Purivat, D., et al. 2019. Development of Slow Tourism Potential in Chainat Province. Research report Tourism and Service Industry, Kasetsart University.

Tourism Authority of Thailand (TAT) , Retrieved 1 December 2021, from website: <https://www.tourismthailand.org>

Woranart, D., 2014. Abilities in Tourism Management of Local Administrative Organizations in Chainat Province. *Journal of Economics and Management Strategies* 1 (1): 33-34.

Wipha, S., 2008. The Potential of Ecotourism in Khao Kho District. Phetchabun Province. Master of Science Thesis Tourism Planning and Management for Environmental Conservation, Srinakharinwirot University.

Sirijanya, P., 2010. Assessing the potential of tourist attractions in Mueang District, Trat Province, for developing eco-tourism routes. Master of Science Thesis