

CHAPTER II

LITERATURE REVIEW

Bicycle tourism is one of the significant green tourism trends, (Wen and Lee, 2003). Currently, bicycle tourism has become of serious concern and development particularly in most developed countries such as America, Europe, Australia, and New Zealand. The efficiency of cycling services provides especially cycling infrastructures that facilitate to cyclists to cycling is play important key factor leading the appropriate bicycle tourism development and meet their requirement. Therefore, this study reviewed the relevant theories and previous study concepts determined by the topic areas as follows;

1. World Bicycle Tourism Background
2. Cycling infrastructure
3. The appropriate facilities for bicycle tourism
4. The development of bicycle tourism
5. Cycling motivations
6. Others case studies

World Bicycle Tourism Background

Several issues are related to the term bicycle, but it rarely denotes bicycle as a part of tourism, however, Sustrans (1999, p.1) has defined bicycle tourism as ‘...Recreational visits, either overnight or day visit away from home, which involve leisure cycling as a fundamental and significant part of the visit’. In additional, Wen and Li (2003) defined bicycle tourism as ‘a positive activity, which included both transportation and recreation experiences’. Ritchie (1998) support and outlines the tourism activity using bicycle tour has more significant mode of vacation or holiday transport. Bicycling is the form of non-polluting activities and people ride bicycles for a widely purposes such as recreation, personal business or even for work. To classify the bicycle tourism Faulks, Ritchie and Fluker (2006) agreed that to identify bicycle tourism in order to present the size and scope of cycle tourism thus, the definition will

base on activity and the use of a bicycle on holiday. The different sectors were Touring, Community cycling events, Competition and Mountain Biking.

To approach bicycle tourism and gain more knowledge of how bicycle tourism is being consider worldwide thus, the review of the area where cycling promote and develop to tourism is mentioned as:

1. Bicycle tourism in America

In the research report of the European Cyclists' Federation (2004) stated that the 20 cities around the world signed a common action plan of bicycle tourism development at World Bank headquarters in America. Therefore, to improved safety and enhanced quality of life also agree that bicycle friendly to environmental and probably reduced traffic congestion. All participants indicated that the efficiency to development of bicycle friendly communities were from the enthusiastic advocate of local authorities. The representatives of four European countries and The United of America consisted of Berlin (Germany), Cape Town (South Africa), Copenhagen (Denmark), Dar es Salaam (Tanzania), Dublin (Ireland), Edinburgh (Scotland), Gdansk (Poland), Helsinki and Oulu (Finland). Sandnes (Norway) Winterthur (Switzerland) and The American cities of Brentwood (California), Carrollton (Georgia), Columbia (Missouri), Metuchen (New Jersey), Palo Alto (California), Salem (Massachusetts), Santa barbara (California), Salt Lake City (Utah), Schaumburg (Illinois) and Washingto (DC), et York (Pennsylvania) signed an action plan with commitment.

2. Bicycle tourism in Europe

The European cyclists Federation shows that "London has a high potential for being a cycling city" and reported the survey as Central London and others parts of London approximately 1.4 million of bicycle ownership and at least one bicycle per household around 300,000 trips in London by bicycle each day. In additional, the survey shows the bicycle use reason of Londoners 23% with reason of traffic congestion and 19% mention that cycling is healthy while 11% for the public transport is unreliable. The most accept those who cycling because it is convenient to their lifestyle. This investigation indicated that recent cycling improvements might be having an effect on the cycling action plan. (ECF, 2004).

3. Bicycle tourism in Australia

The Bicycle Transportation Alliance (2010) shows that Bicycle User Groups (BUGs) presented as a cyclists team who work adjoining with local government to the purpose of improved factors related to biking such a survey for cycling condition along with biking hazard report in order to activate local government generated plan for cycling improvement with in local area.

4. Bicycle Tourism in Thailand

The first bicycling tour operator established in 1995. Since then, bicycle tourism has been suggested by Ministry of Tourism and Sport in cooperation with Ministry of Foreign Affairs and Office of the National Economic and Social Development Board Economic Cooperation Strategy Project CLMT Tourism Cooperation Bicycle Tour (Cambodia-Laos-Myanmar-Thailand) to set up program of Bike ride event (Cycling Thailand, 2010). The Tourism Authority of Thailand and The Thai tourism industry are jointly pursuing “green initiatives’ in an effort to maintain the delicate balance between tourism promotion and environmental protection to ensure long-term sustainability therefore, the Seven Green concept developed by TAT has initiative to promote awareness of environmental to all tourism stakeholders. The bicycle tour has been indicated for the environmental friendly sector to develop recently.

The Bangkok Green Bike campaign is a pilot project that attempts to explore cycling tourism in Bangkok since August 2008. It is provided free of charge to ride in eight station around Rattanakosin Island where present the old scenery Bangkok district to people who interest in cycling (Bangkok Tourism Division, 2011). Ministry of Tourism and Sport of Thailand (2010) reported that the tourist arrivals in Thailand 1,437,686 in January in contrast, the number of tourist dropped around 11.67% on January 2009 and fluctuated widely until July 2009. Surprisingly, In February 2010 shows the highest of 41.87 % tourists visit Thailand. The significant factors effected on tourist amount probably from the repletion of the host country to provide any service to the tourist, therefore the abilities of service and offer to meet the tourist demand is one of the key of success.

The efficiency of bicycle lanes will take effect if cars and motorcycle a pathway is separated (Bangkok Post Learning, 2010). Sukhumvit road illustrate

unsafely cycling, many motorcycles use the same path of bicycle moreover. It is indicated that the bicycle lanes or pathways are to be used for bicycle to the safety cycling, management are inadequate as bicycle pathway are full of vendors. This is reflecting on bicycle infrastructures are provided while well management is ignored by related organization.

In a publication by Tourism Authority of Thailand (2010) it was announced that a “Fun Bike Ride” was to be held at Chiang Mai. The events promoted with the purpose of annual charity events but not serious intention promoted as tourism therefore, the infrastructure are not providing for a long-term use. Tourism Authority of Thailand (Marketing Plan 2009) plan for next season currently promoting tourism as a main marketing plan in the same previous slogan of “Amazing Thailand” the project plan call “Seven Wonders of Amazing Thailand” for oversea market. One of themes was called “Nature the Beauty of Natural Wonders” which present green tourism mode to perceive of environmental value and energy conservation in the forms of “Seven Green” and bicycle touring is one mode of green logistics highlight on tourism activities using environment friendly transport. The plan is desirable, yet appropriate plan for the term of infrastructure present.

Cycling infrastructure

The American Association of State Highway and Transportation Officials (1999, p. 2) defines bicycle facilities as “a general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically designated for bicycle use.” Moreover, the AAOSHT also given information for type of bicycle facilities and indicated that selected the appropriate facilities depend on many factors and descript the overview as: (AAOSHT, 1999, p. 7)

1. **Shared Roadway:** the shared roadway that is no bikeway designations. Presently found in large cities such as USA. This probably inefficient and unsuitable for travel by bike regarding to roadway conditions but some rural highways can be used for cycling tour and need to enhanced connect with other bicycle route. However, the measure of road development with 1.2-m (4-foot) paved shoulders and 100-mm

(4-inch) edge stripe in order to improve of the safety and convenience of bicyclists and motorists along such routes.

2. **Signed Shared Roadway** is designated by bike route signs and provides continuity to other bicycle facilities (usually Bike Lanes) or designate preferred routes through high-demand corridors. The signing of shared road should indicate to other vehicle rider to aware when bicycles are present.

3. **Bike Lane or Bicycle Lane** are appropriate established for bicycle by marking and signing along streets and intended to increase the capacities of carrying mixed and motor vehicle.

4. **Shared Use Path** are generally provided a recreational opportunity, The most common applications are along rivers, ocean fronts, canals, utility rights-of-way, former or active railroad rights-of-way, within college campuses, or within and between parks.

The provision of infrastructure for cycling in urban areas essential contribution to reached sustainable mobility (Lumsdon, 1997). Therefore, the quality cycling network such as lanes, Cycle Street or contraflow become element stimulates cycling. It is very important that cycling infrastructure need to be visible, cohesive and safe to require achieving high levels of cycling likewise the significant policy of transport and traffic was also essential to encourage the success of bicycling tourism development (Jonkhoff, 2011)

The appropriate facilities for bicycle tourism

It is important that the measures put in place to encourage cycling are appropriate to the road and in accordance with best practice. Recent research highlights the danger of inadequate bicycle lanes that may actually encourage drivers to pass closer to cyclists than they would in absence of any lane (Parkin and Meyers, 2004). This emphasizes the hierarchy approach that it may be preferable to address traffic level and speed where roads are unsuitable for proper cycling infrastructure. The design standards set out by Cycling England are not mandatory however; there are legal responsibilities and liability for design and maintenance that encourage good practice.

The cycling infrastructure comprises the public ways available to cyclists. This includes the network of streets and public roads used by motorized vehicles, minus those roads from which cyclists have been banned (most motorways or freeways), plus additional bikeways that are not available normally to motorized vehicles, such as foreshore ways, greenways, rail trails, cycle tracks, bike lanes and road shoulders. In addition, some jurisdictions permit bicycling on sidewalks.

The 2011 riding a bike for transport survey conducted by The National Heart Foundation and Cycling Promotion Fund present a common theme for not cycling more often was due to road traffic conditions or safety. Those respondents were likely to rate unsafe road condition, speed/volume of traffic, lack of bicycle lanes or safety as key reasons for not cycling often (CPF, 2011)

Aspects of the cycling infrastructure may be viewed as either cyclist-hostile or as cyclist-friendly. In general, roads infrastructure based on prioritizing certain routes in an attempt to create a state of constant “flow” for vehicles on that route, will tend to be hostile to those not on that route. In 1996, the British Cyclists Touring Club (CTC) and the Institute for Highways and Transportation jointly produced the document “Cycle-friendly infrastructure: Guidelines for planning and design” (CTC, 1996). This defined a hierarchy of measures for cycling promotion in which the goal is to convert a more or less cyclist-hostile roads infrastructure into one which encourages and facilitates cycling.

The Development of Bicycle Tourism

The bicycle tourism was not significant tourism market in the past, tour agency considered to large group such a mass tourism that generated wealthy income. Bicycle just an image of transport. Recently, green tourism as an alternative has recognized of the several advantages of cycling, since then bicycle tourism market continuous growth and promoting to worldwide (Onestreet, 2010). In addition, the data indicated that the growth of bicycle tourism related to health improving as the report demonstrated riding bicycle can burn over 500 calories per hours, therefore cycling while having fun outdoor motivated to the growth of bicycle tourism in the health benefit of active transport mode.

While Jackson and Ruehr's study (1998 as cited in Wen and Li, 2003, p. 1678) presented Attitude survey for bicycle use in San Diego by San Diego Association of Governments, the result shows of their support to promote cycling with encouragement from government.

As described in Faulks, Richie and Dodd (2007, p. 5). Gibling give an example, as the social benefit of cycling as Mountain Biking World Championships 2006 in Rotorua offered the community to participate in the sport of cycling develop a sense of pride through positive media attention and seeing visitors enjoy their home area. As well as promoting within the local community, an awareness of local human and environmental resources and the opportunity to participate of sport cycling.

Copenhagen, in Denmark has one indicator to highlight cycling shows and the cycling image everywhere in towns so people are used to the common use of cycling daily. It is probably the healthiest trend and obvious that cycling is the best activities for overweight people and most significant cycling become culture in the town (Cycle Chic, 2010). "The International Travel Daily News" is a daily travel and tourism news portal for the international trade market since 1999 online, reports Koumelis (2003) The World Tourism Organization has the project of "Peace through Tourism" with Seoul-Beijing Bicycle Tour which organized by WTO headquarters in Madrid Spain. This is the 3rd an international bicycle event since the first held in 2001 of the Seoul Osaka Bicycle Tour and in 2002 China Bicycle Tour.

The purpose of the project encouraged everyone to enjoy and share the experience and feel the sense of culture, history, and sightseeing under the concept of Peach through Tourism, which comprise of Tourism, Sport, and Peace. The event organized by Osaka Bicycle Tour Secretariat coordinated with Airline, International Tour agency and Bicycle Team in order to promote worldwide. Throughout worldwide bicycle tourism development review, it is obvious that the initial cycling form as transport budge toward sport activities while health trend are booms when the world realized of environmental bicycle growth as an alternative tourism and much more important.

The area of infrastructure studied as Pedal Power by Canberra Region Cycling (2007, p.1) presented that "Making it easier for these people to cycle would reduce the need for car parking spot". The limited of car parking probably motivate

people to use more bike travel in short length. Likewise Lamont (2007) found that the need for further research were cycling tourist require on the demand side of infrastructure, information including support services. If appropriate bicycle infrastructure is provided, the cycling is very active for great alternative travel.

To observe worldwide bicycle tourism promotion and turn on the motivation development plan for bicycle tourism is demonstrated in **Table 1**. It shows the example of development plan for cycling promotion initiatives from around the world year 2008.

Table 1 Cycling Promotion Initiatives from around the World, 2008

Location	Initiatives	
Netherlands	The first country to adopt an official national bicycle policy, the Netherlands averages more than 2 bikes per person. Nearly 19,000 kilometers of paths and lanes are offered exclusively for bicycles, with over 7,000 kilometers of these in cities.	1960
Victoria, Australia	Planning provisions were amended to require bicycle parking and end-of-trip facilities (e.g. showers and lockers) for all commercial, retail, and multistory residential building projects exceeding 1,000 square meters.	2004
Chicago, IL, USA.	This city's cycling goals include achieving 5 percent of all trips under 5 miles by bike, expanding its bikeway length to 500 miles, and increasing the number of bike-transit trips by 10 percent each year.	2005
Paris, France	Mayor Bertrand Delanoë launched extremely popular <i>Vélib</i> bike rental scheme, which now provides 20,600 bikes at 1,451 stations. <i>Vélib</i> is expected to double or even triple the number of daily bike trips.	2007
Freiburg, Germany	The transport development plan approved requires every new construction project within the city to provide bicycle parking.	2008
London, UK	Mayor Ken Livingstone announced plans for a massive program to invest nearly \$1 billion over the next 10 years in	2008

Table 1 (Cont.)

cycling, launching a Paris-inspired bike rental system; creating more cycle lanes; improving and expanding bike parking, especially at rail transit stops; and providing online cycling information.

Source: Compiled by J. Matthew Roney, Earth Policy Institute, 2008

The comprehensive paradigm bicycling tourism in Korea

The comprehensive paradigm of bicycle plan found in **Korea** (The Korea Transport Institute, 2010) this plan was address the Korea situation underneath The Greenhouse effected, Energy crisis, Climate change including pollutions. The policies and plan very strong present with supported from government since 1993 in addition, Korean cycling policy plan continue growth with total budgets 1.2 trillion won in order to stimulate bicycle use. The obvious comprehensive plans also indicate significant bicycle infrastructure development with infrastructure target of 17,000 km. cycling path in 2012. The comprehensive plan for Green Growth has appropriate approach framework as;

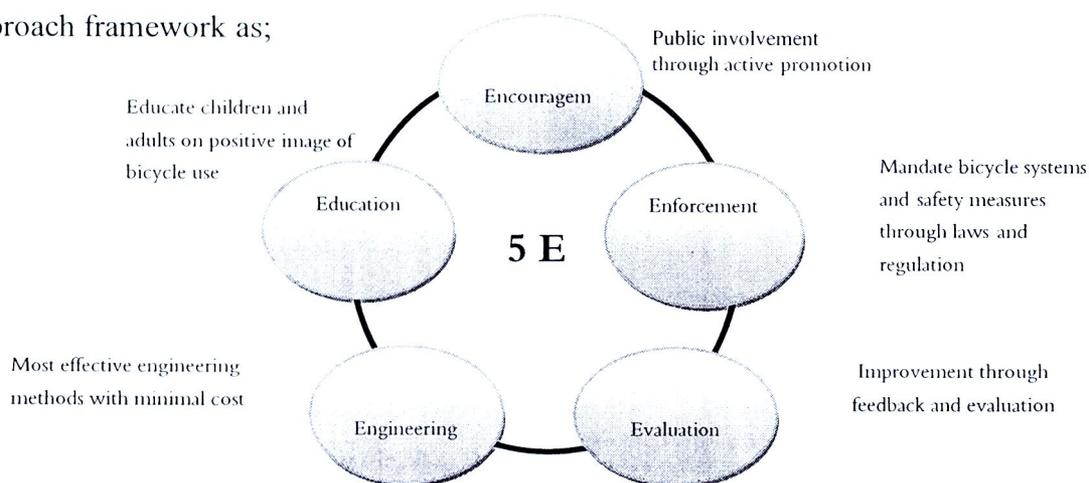


Figure 4 Legal / Institutional Frameworks for Korean Policies to Stimulate Bicycle Use for Urban Transport

Source: The Korea Transport Institute, 2010, p. 25

Comprehensive Plan for Green Growth consists of bicycle industry and bicycle infrastructure correlative development (Figure 5).

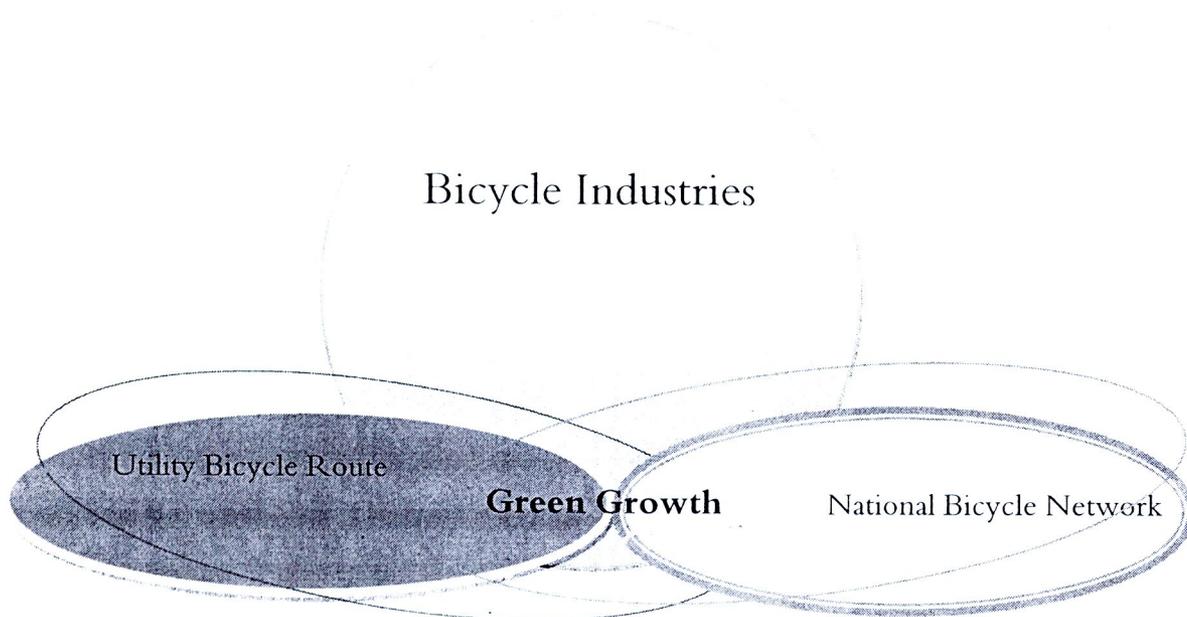


Figure 5 Comprehensive Plan for Green Growth

Source: The Korea Transport Institute, 2010, p. 23

The Korea Transport Institute elaborated on making policy between government and private sectors play significant role through the project objectives therefore, the strategies of policy direction focused on legal/ Institutional in managed mandate facilities, safety and regulations, bicycle insurance also infrastructure that presented in the form of bike facilities, utility bikeways and national bike network related with public awareness such as campaigns, education and promotion (The Korea Transport Institute, 2010).

The obvious pattern of development plan would achieved therefore, all sectors involved cooperate and sincere to encourage management process under sustainable development idea. Apart from that, the success approach able to stimulate the interested cycling and contribute toward bicycle tourism where generate income to tourism industries.

Cycling motivations

As previously researched, Lamont (2008) found that the attracting destination for independent bicycle tourists were the region's ability of cycling support provided such as a potential of cycling infrastructure, magnificent scenery, aiding service for industries and accessibility. Furthermore, to encourage the use of bicycle tourism sufficiently, the host must be supplement such a promotional, marketing and widely information and events of cycling provided (Pucher and Buehler, 2009).

Social interaction in participant sport tourism provides opportunities to explore new experiences and enjoyable (Faulks, Ritchie and Dodd, 2004). Cycling offer closer relationship between people who similar interest. It is also providing valuable leisure time while benefit to health condition.

The motivational factor that bring to recreation activities identified aesthetic, learning and creative motives while avoidance factor such relaxing or escape from the stressful reason. The social factor as friendship and competence-mastery factor like fitness or health encourage people to cycling (Beard and Raghep, 1983).

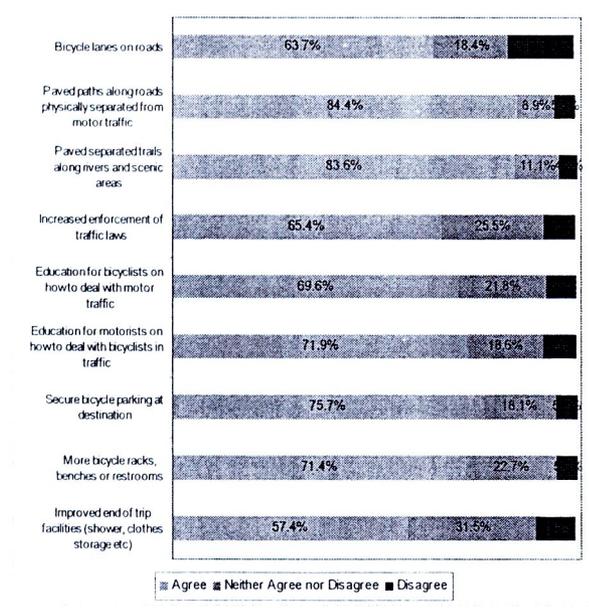


Figure 6 Conditions that would encourage the use of bikes

Source: CPF Cycling promotion foundation and Heart Foundation Survey, 2011

Cycling Promotion Fund and the Heart Foundation 2011 survey found the condition that would encourage the use of bike (Figure 4). The majority of respondents present over 80% agreed that paved paths along roads physically separated from motor traffic and paved separated trails along rivers and scenic areas would encourage them to ride more than they do while over 70% agreed that education for motorists on how to deal with bicyclists in traffic, secure bicycle parking at destination and more bicycle racks, benches or restrooms would encourage them. Only few respondents about 57% indicated that improved end of trip facilities such as showers and clothes storage would encourage them to ride more than they do.

Conclusion

The review of Bicycle tourism background and all factors that are related to the bicycle tourism are presented above. This included world bicycle tourism, cycling infrastructure, the appropriate infrastructure that facilitate to cycling assist to knowledge about best practice from international development and also provide the imperfect part of cycling tourism development therefore, the gather information will be the best guideline to improve and find out what are the ideal to future improve and development of bicycle tourism in Bangkok.