



A Study of Marine Sport Tourism Development on Island – A Case Study of Jibei in Penghu, Taiwan

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Authors' contributions

This work was carried out in collaboration between all authors. Author HMC designed the study, wrote the protocol, and wrote the first draft of the manuscript. Authors LCCL and TMY managed the literature searches, conducted interview and analyses of the interview results and wrote discussion. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AIR/2015/15031

Editor(s):

(1) Marco Sorrentino, Department of Law and Economic Sciences, PegasoTelematic University, Italy.

Reviewers:

(1) Wen-Ke Liang, International Business, Southern Taiwan University of Science and Technology, Taiwan.

(2) Shiro Horiuchi, Yamagata University, Japan.

(3) Anonymous, Malaysia.

Complete Peer review History: <http://www.sciencedomain.org/review-history.php?iid=869&id=31&aid=7531>

Original Research Article

Received 3rd November 2014
Accepted 31st December 2014
Published 14th January 2015

ABSTRACT

Marine sport tourism in Taiwan has become one of the popular intensive tours in recent years. However, related research has focused on the economic and social issues, which overlooks factors contributing to the successful development of sport tourism. The main purpose of this study is to analyze the success factors for the development of the island's marine-sport tourism using Jibei Island as an object for investigation. Through qualitative methods of investigation, we found that a successful development of marine-sport tourism for an island is attributes to: 1. the coupling of natural environment and a variety of water activities; 2. the infrastructures such as transportation of island; 3. the image of the island; and 4. the support from the government. The findings in this study not only provide local government with recommendations for the development of tourism industry, but also serve as references for relevant future research.

Keywords: Sport tourism; marine recreation; island tourism; impact; Jibei Island.

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1. INTRODUCTION

In recent years, Taiwan with the popularity of leisure activity, people in the process, the proportion of practicing a sport generally grow and become one of the main motivations for tourism. According to the Taiwan Tourism Bureau [1] published the "2013 Taiwan National Travel Survey" report, the purpose of the national tourism "tourism and leisure resort", the trips are mostly "pure tourism" (accounting for 65.9%) the largest, followed by the "to do sport vocation" (5%). From the above data, a "sport vocation" based tourism activities, that is sport tourism has become a favorite of the people of Taiwan in a weekend tourism activities. Because Taiwan is surrounded sea, have abundant marine resources, very by suitable for development of marine-based recreational sports. Penghu is Taiwan's largest off-shore islands, and has a wealth of natural resources, including natural tourism resources (marine ecology, flora and fauna, beaches, intertidal, small islands, the unique basalt geology ground type), cultural tourism resources (farming and fishing, military dependents, temples, historical and cultural monuments), etc., provide an important basis for the development of tourism. Because the winter northeast monsoon, Penghu differences are significant seasonal tourist crowds. Currently Penghu tourism entrepreneurs operating in the tourist season, most based on water-based activities, and these activities are related to sports, such as snorkeling, scuba diving, banana boat, jet skiing, and aerial towed umbrella.

In recent years, residents of Taiwan island tours being loved, and Penghu is usually preferred major tourist destinations, not only that, the Penghu islands, marine tourism activities, but also by a long list of foreigners living in Taiwan, as is the vacation destination. The most prominent feature is Penghu an entire county administrative region, all classified as Penghu National Scenic Area is divided into three main recreation system. Jibei Island is part of the North Sea recreation area, in the North Sea islands, tourists visit the island favorite, mainly because the island has a variety of water activities is to attract tourists to engage in sport tourism reasons. According to the Taiwan Tourism Bureau statistics [1], in the year 2013, Jibei Island has over 319,904 tourists visited. Because Penghu is limited under the influence of the northeast monsoon in the winter, so marine sports tourism activities, the actual operating time of only six months (April to October), the

other time you will not be able to engage in activities. Although in recent years there are so many scholars involved in Penghu's tourism research, for example, explore the topic of casinos etc. [2], tourism impact [3], eco-tourism [4], and island manage [5]. Due to Penghu's tourism product is mainly dominated by marine recreation activities but in terms of marine sports tourism research, but has fewer researchers to conduct empirical research [6].

However, scholars in research, but no in-depth discussion of Penghu island tourism development factors, most remained focused on analyzing the behavior of tourists, which is considering the demand side only, but did not understand why supply needs. Because Taiwan people's increasing demands of island tourism [7,8], but how successful and effective development of island tourism, such as establishment of marine tourist resources planning and infrastructures, as well as the question of how to reduce the negative impact, Jibei Island and its development experience can provide a reference to other islands. The purpose of this study is to analyze Jibei operating in the marine sport tourism, and analysis that development success factors, hoping to be able to provide other islands in the development of the marine aspects of sport tourism reference.

2. LITERATURE REVIEW

2.1 Sport Tourism

Sport tourism is defined as a personal travel is intended for leisure or competition, while leaving the main place of residence to participate in sports, watching sports competitions, or to visit the sports tourism attractions [9]. Hall [10] defines sport tourism as: "the purpose of travel of the reasons for non-commercial to participate or watch sports events while leaving their own range." Standeven and De Knop [11] defines sport tourism is based on non-commercial or business/ commercial reasons, must leave your home or place of work travel, during active and passive involvement in sport, that may be involved in sporadic or the type of organization to participate in sports. Gibston [12] pointed out that the sport tourism can be defined as a leisure-based tourism; it allows people to temporarily leave their home range, to engage physical activity, or visit the sports attractions. Sport tourism participation type, mainly divided into three types, people travel to mainly involved in sport (activity-based sport tourism), as well as

spectator sport tournament (tournament sport tourism) [10,12]; there is also a visit famous sports attractions, monuments, memorials, etc (retro-style sport tourism) [12]. Whether it is engaged in an activity, or watch sports competitions, sports just as "leisure travel" as providing a strong incentive [11], sports participation can also provide meaningful and purposeful "travel experience" [12], in addition exercise can stimulate the tourist resort area of development and investment [12], to contribute to regional development [13].

2.2 Element of Marine Tourism Development

On element of marine tourism development, Wu and Chang [8] studied found that the success factors of the development of the island marine tourism: a. has a theme with unique attractions, including the natural landscape and historical heritage, and can attract tourists come to visit. b. On the island's public facilities, transportation facilities, and can provide accommodation and catering, to extend the residence time of tourists. c. Can provide complementary entertainment to meet the other requirements of tourists. d. Islanders friendly attitude can receive visiting tourists, and have sufficient information channels, communication links with the outside world. e. Need for government departments to help strengthen the image of the shape island tourism, tourism resources for regional integration, and marketing work. Wu and Chang [14] studied found that in Penghu Island Recreation Area, the winter can be engaged in marine sport tourism activities there are 15 places. In the winter, can be engaged in marine sport tourism activities include: Kayaking, Windsurfing, and Wind Sailing Boat, Surf-Chasing, Iso-Fishing, Water-Skiing, Trawling and Boat Fishing. The Penghu public facilities, accommodation, catering, complementary leisure, and transport facilities, not only in the winter development marine sport tourism, but also have the potential for the development of international tourism. Khadarooa and Seetanah [15] analyzed 28 countries, 1990-2000 transport infrastructure to attract tourists in the decision to choose the destination elements. The results showed that transport infrastructure is an important decision factor tourist. Sport tourism attraction is attracting tourists to engage in sports-related tourism activities in the principal factors [16], not only with water-related tourism, sports and recreation activities, but also to attract people their activities to the destination of the main factors [17]. In Chang [18] marine sport

tourism studies, also found in Penghu tourism to attract people to the main reason, but also with the "coastal recreational activities" related.

2.3 Tourism Impacts

Tourism development is widely considered being able to improve local economy [19]. Most studies found the development and promotion of tourism, which is believed to bring various advantages and profits to the local development [20]. However, the native effects of tourism cannot be overlooked. As Huang and Stewart [21] pointed out that it changes the inter-relationship between local residents, tourists and communities and possibly causes negative impacts on the living quality of the local residents. The negative impacts on economy presents in the unfairly increased real estate cost and property taxes, the increased living cost and the price of goods and services. For the negative impacts on the social and cultural aspects, it increases traffic accidents, the rate of vandalism, the occurrence of gambling or illegal games, and possibly the increase of exploitation of local natives. The negative environmental impacts, on the other hand, include the damage of natural environment and landscape, destroy of local ecosystem, and the environmental pollution, such as litter, water, air, and noise [20]. Chang et al. [22] analyze the residents recognized on costal sport tourism impact and attitude for island develop in Penghu. After testing, four results are shown: 1. On the costal sport tourism positive impact in Penghu, most residents recognized higher are 'local leisure and recreation opportunity increase for residents', and 'increase play and recreation facilities benefit'. 2. On the costal sport tourism negative impact in Penghu, most residents recognized higher are 'tourism busy season make traffic jam' and 'the ocean pollution'. 3. There are significance differences on impact recognized in different residents. 4. There are significance differences on impact recognized in different economic relying residents. However, there are no influences on attitude whether or not participation in environment protect group.

2.4 Social Exchange Theory

The social exchange theory is frequently employed in the study of the local residents' attitudes toward tourism development [23]. And Leonard's study pointed out, residents the cognitive and views for tourism developing; they will affect the attitude of local tourism development [24]. The gist is to explicate that the

interaction between individuals is an exchange behavior in nature and while people conduct this action, they take into consideration the involved profits and rewards. That is to say, during the exchange process, an individual will examine the benefits in their interaction behaviors with others, and if they cannot obtain satisfactory profits and rewards, exchange behaviors are regarded unnecessary. In tourism, supportive attitudes of local residents are considered as willing to conduct exchange behaviors. Nevertheless, their attitude relies on their recognition and evaluation of tourism. If they understand that the rewards and impacts are stronger than the cost, they will present positive attitude toward tourism. In contrast, if the negative impact of the higher, the residents that they would be less willingness to accept tourism development, and even take the attitude of passive resistance. Tourism development study also confirmed the attitude of social exchange theory valid interpretation of the residents of tourism development. The majority of residents believe that tourism would have a positive impact, but also have a negative impact, especially for residents not engaged in the tourism industry, will hold the cold-shoulder treatment attitude tourism development [25].

3. METHODOLOGY

3.1 Over Review of Research Area

The Penghu County belongs to archipelago; totals 94 island, administration district includes: Magong City, Siyu, Baisha, Husi, Wangan, and Cimei Townships. Jibei Island (village) belong Baisha Township (Fig. 1). Baisha Township is located in the northern part of the Penghu Islands and encompasses Baisha Island, Zhongtun Island, Niao Island, Yuanbei Island, Jibei Island, Dacang Island and Mudou Island. In addition to these seven inhabited islands, there are also another twenty uninhabited islands as well, making it the local jurisdiction with the most islands in Penghu County. The name Baisha came about due to the abundance of fine white sand on the island and means "White Sand" [26] (Fig. 2). According to Baisha Township Household Registration Office [27] statistics for August and Jibei Island (village) population of 1,566 people, but more than half did not live on the island. According to local residents, most of the people live on the island depends on tourism for a living, and then is engaged in fisheries.

3.2 Data Collection Methods

Penghu tourism development studies researchers since the beginning of 2006, at least once a year to conduct interviews and observations to the study and questionnaire three times, for the depth of understanding. In Jibei's study, researchers in April 2012 and July respectively, and April 2013 and in August, as well as April 2014 and August, carrying out observation and interview research on the island, and stayed for 4 days at a time. This study used qualitative method; the first step was used document analysis, and gathering relevant information. Mainly collect about Jibei introduced by the internet, and again to collect reports of government tourism brochures and tourism magazines, as well as academic research papers. Second-step was interviews with local B & B owner, tourists service and residents, and also interviews the tourists go to the ground at the time, in order to increase the credibility of the data (respondents profile see Table 1). In addition, researchers and field visits to various attractions, in order to understand the contents of the authenticity of the interview.

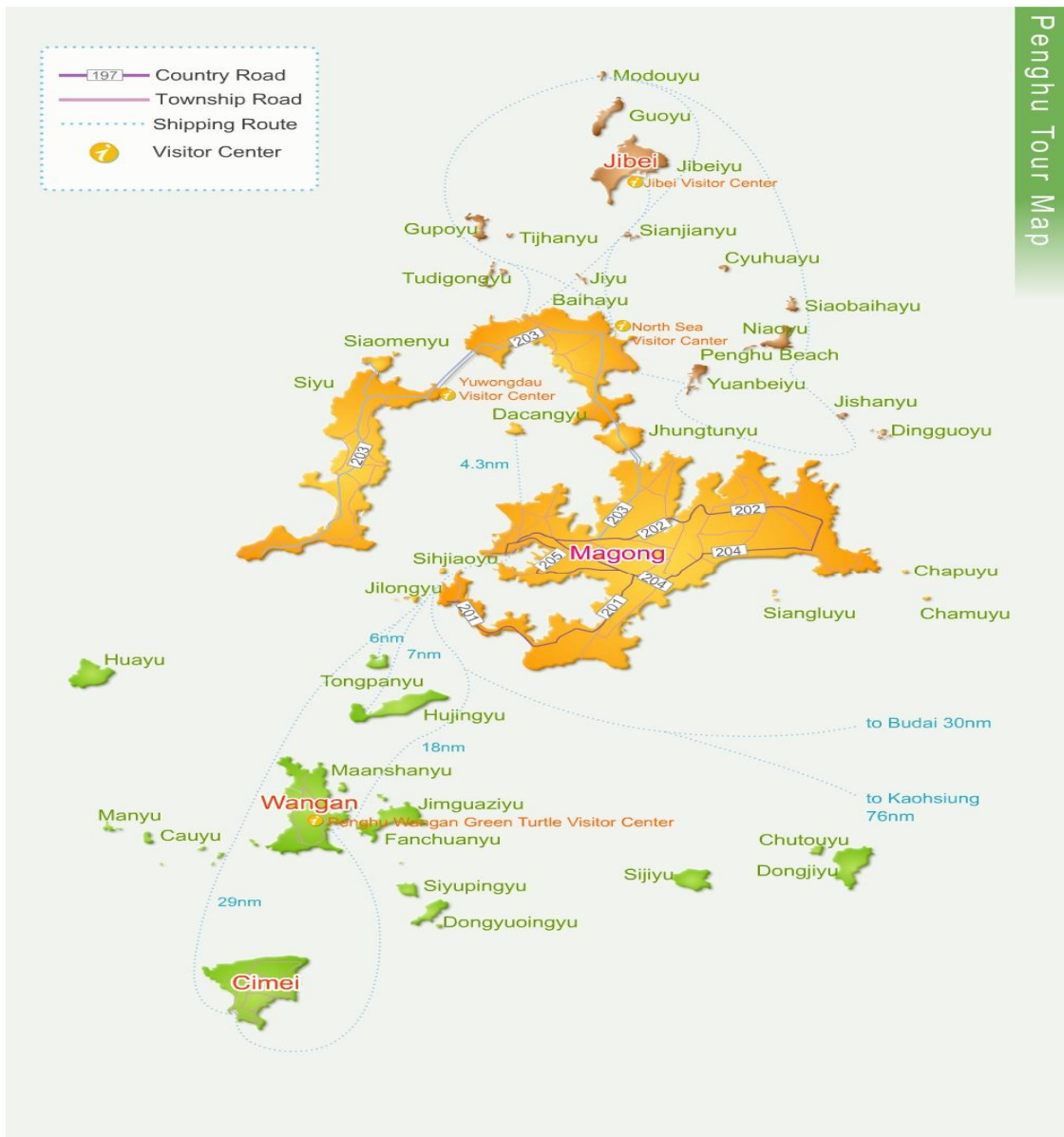
Interview data of this study are based on respondents' identity number (BB, GC, SFE, TS1, TS2, T1, T2, and RS), title of interview (AT = attraction, HS = hospitality service, CL = complementary and leisure, EA = enhance the appearance, LR = local residents, CL = Communication and linkage, and RI=resources integration.), and arranged by the selected sentences. For example, TS101AT0128, TS1 is a tourist service (male) short title 01 represents the first question and AT = attraction, 0128 which means researchers interviewed answered connected with attraction of the sentence.

3.3 Interview Manuscript

In this study an interview manuscript mainly based on the sport tourism [11,12], elements for marine tourism development [8,16], tourism impact theory [20,22], and social exchange theory [23,24]. Interview outline a seven topics, including which attraction is tourists visited in the Jibei, hospitality services, complementary leisure facilities and services, local government and residents how to enhance the appearance of the shape, tourists impact, communication and linkage with outside, and regional tourism resources integration.

Table 1. The respondents profile

Respondent	Gender	Age	Inhabitancy
BB (B & B owner)	Male	55	Penghu, Jibei
GC(Grocery)	Female	59	Penghu, Jibei
SFE(sea food eatery)	Female	65	Penghu, Jibei
TS1(tourist service)	Male	38	Penghu, Magong
TS2 (tourist service)	Female	21	Penghu, Magong
T1(tourist)	Male	38	Taipei City
T2(tourist)	Female	22	New Taipei City
RS (Residents)	Male	66	Penghu, Jibei (fisherman)



**Fig. 1. The Penghu County belongs to archipelago; totals 94 island, administration district includes: Magong City, Siyu, Baisha, Husi, Wangan, and Cimei Townships [30].
Jibei Island (Jibeiyu) belong Baisha Township**

3.4 Data Analysis Methods

Data analysis step of the research are as follows: a. after the end of the interview, the first order based on interviews with respondents, the interview data processing and analysis. B. Would be converted interview transcripts researchers in interviews after the gradual completion of the written interview transcripts, based on detailed interviews with draft record interviews, omissions, etc., as a follow-up data analysis checklist purposes. c. Induction will be classified and coded information. d. Cases illustrate the analysis for each concept or phenomenon of induction. e. Summarize and analyze data after finishing, the researchers discuss, modify, sorting out the analytical framework and the fact that the results presented in this study the final conclusions and recommendations.

3.5 Analysis on Reliability and Validity of Interview Data

1. Prior to the interviews, researchers will study the problem and purpose, first to a job interview and pilot interviews, to understand the relevance of the interview focused on. Secondly, the respondents' intentions and interview locations, this study will be taken into account. 2. In this study, interviews, carried out by the researchers themselves, according to interview manuscript, led by researcher respondents to easily chat with interviews in an orderly fashion. After no errors in determining the data collation, analysis, in addition to researchers come together to discuss, and discussed with the visitors as well as residents who have to get to the place, avoid a subjective judgment.

4. RESULTS

4.1 Sport Tourism Attraction

Jibei Island is 3.1km² in area, with a coastline of 13km; it is the largest island on the North Sea, and one of the most popular tourist spot in Taiwan (Fig. 3). "*The reason we Jibei Island to attract tourists to vacation, is to have a variety of activities in the oceans and beautiful white sandy beaches* (TS101AT0128)". The "Sand Beach Beak" at the south end houses a white sand beach extending 1500m, it is a marine deposit landform – "Sand Spit" – formed by corals and shells that were moved here by the sea; it is a spectacular sight when looked down from the air, a truly world-class natural landscape [28]. "*The*

reason I travel to Jibei, because it owns Taiwan's most beautiful beach is very wide and fascinating, and no contamination of the sea, has good weather in the summer, water sports and exciting adventure (T101AT0236)". Jibei is heaven for water activities, housing various types of recreational activities, including banana boat, dragged buoy, two-man speedboat, water motorcycle, under-the-sea sightseeing boat, paragliding and snorkeling. Those that enjoy water activities will sure have a wonderful time here at Jibei. Another tourism feature of Jibei is the number of "stone weirs" housed here; there are over 80 stone weirs, more than any other places in Penghu, thus winning the name "Home of the Stone Weirs" [28]. Respondent mentioned: "*This is my third visit to Penghu's Jibei, and I also take my family and relatives for a total of eight men, and thought it was very good, with the Philippines or Thailand's Islands, seafood is cheap and delicious, rich in marine activities and exciting, the locals are very friendly* (T201AT1152)".

4.2 Hospitality Services

As Jibei water activities flourish, landing every peak season (April-October) about 250,000 to 300,000 tourists, driven the rise of the local B & B industry, but the legal and illegal in half, according to Penghu County Government Tourist Office statistics, legitimate B & Bs or hotels sixteen illegal industry has sixteen plus price competition, for the quality of tourism threat. "*Actually this is local government is aware of, but due to the electoral reasons, affects the vote, so the government is holding without incident will not be involved in management's mind* (BB02HS0036)". Due to Jibei many tourists on holiday, but also caused illegal B & B (not registered, no business license) constantly established, in June 2013, the illegal business of B & B, the self raft passengers, but did not allow tourist to wear lifejackets, has allowed the sea snorkeling, resulting in a person drowning incident. "*There is legally operated tourist services on the island, we are using packaged trips, including tourists came to the island to engage in water sports, riding a scooter around the island, as well as tickets or accommodations, now is a package of products* (TS202 HS0068)". "Because Jibei surrounded by the sea, the majority of residents are fishing for a living, so there are many seafood restaurants on the island, as well as seafood snack meal provided to tourists. In the consumer goods area, there were several grocery stores, providing local residents

and tourists shopping. *"Because our people's livelihood articles here need to be shipped over from Magong Island, so the price will be more expensive over there (GC02HS0002), but the seafood is a local beach and catch, so the price than the Magong island and Taiwan cheaper and absolutely fresh (SFE02HS0006)".*

4.3 Complementary Leisure Facilities and Services

Jibei Island main attraction for tourists is the marine recreation activities, the local tourism industry and the yacht industry, as well as providing the intertidal zone eco-tourism, fishing village to experience the fun of life, fishing, stone weirs fishing experience. *"Our activities are very abundant on the island, especially for accommodation of tourists on the island; we offer night fishing, eco-experience, the fishing village cultural experience, as well as barbecue activities etc. (TS103CL0637)".* And at night, the industry also offers barbecue, campfire, karaoke, night fishing and other activities. *Respondent said: "last night's activity is very interesting, we went around the campfire, we sing and drink, there are ecological experiences of intertidal activities and night fishing, and this is usually not experience feelings (T203CL1858)".* Addition to these activities, Jibei also provides eight tourists visiting attractions, namely Marine Park (beach), exorcising stone tablet, Ku Island, Mudou Island, Cican hill, old stone weirs, fishing, and Puji Temple.

4.4 Enhance Appearance and Service

Tourists: *"came to feel the island very beautiful Jibei Island, let the people feel the holiday*

atmosphere (T104EA002)". As Jibei Island is located within the National Scenic Area, in recent years, the government not only assistance and funding grants, but also addition to tourist center and marina pier fishing modeling imagery, the road around the island and set the index and recreation pavilion. Penghu County in 2003 officially became the "World's Most Beautiful Bay Organization," one, the government is also actively for the relevant activities to create a diverse, romantic travel situations, increasing tourists stay overnight on the island will. But in this part of interview is has distinct of results, such as tourist mentioned: *"island of night is beautiful, and very romantic (TS204EA0072)";* engaged in tourist service of residents are positive of certainly, they of answered are is: *"development tourism let we island of infrastructures obtained improved, and has sufficient funding maintenance, we certainly government to will Jibei development became multiple and romantic of tourism surroundings (BB04EA0033), and (TS104EA0011), and (TS204EA0054)",* while non-residents engaged in tourist services are answered: *"I grew up until the age, more than 60 years, grow on the island most of the time, I learned from the backward and remote fishing villages on the island, starting two decades ago after the development of water sports, with assistance from the government of the whole island of construction, progress to become the modern building. But unfortunately everyone's life easier, but some of traditional village houses are gone, it is a pity that place (RS04EA1249)".*

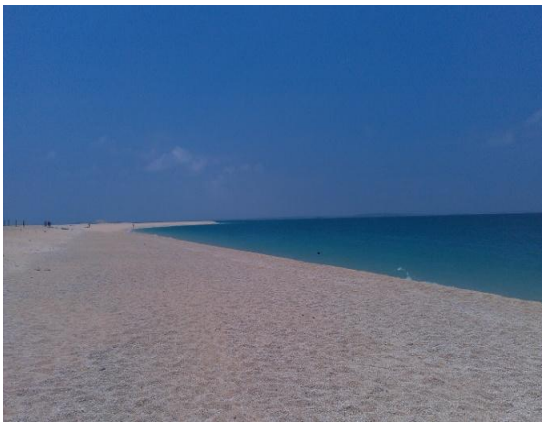


Fig. 2. Jibei Sand Beach is located on the southwest of Jibei Island.



Fig. 3. Various water recreation activities at Jibei beach

.4.5 Local Residents and Community

According to respondents said that tourism revenue is the main source of Jibei Island residents, *"two years ago on the island's main source of income is dependent on fishing, tourism to improve the lives of residents (SFE06LR008)"*, but it is undeniable, many tourists also brought negative impact on the environment, such as marine recreational activities. As tourists came to the island, the main means of transport for the rental of scooters, it exhausts and causing air pollution. *"Because of Jibei island is not large, so riding a scooter is more convenient, but also our people here one of the most important sources of income (BB06LR012)"*. Another plus groups of tourists come to the island, mainly by bus, while Jibei Island is not large, but also the negative environmental impact caused by the main reason. *"During the tourist season when the tour buses come from Magong, bring it back since, we also know that environmental contamination of the tourist season on the island as a whole, but you can't (RS06LR006)"*.

Again is the B & B and resorts issues, some of the industry will be fireworks at the beach with tourists, but also for barbecue on the beach activities, resulting in beach pollution. *"In fact we here are some keen competition in the industry because of the b and b, so each family has their own special activities, such as fireworks, beach campfire barbecue, and the intertidal zone activity, sometimes it is ecological damage (GC06LR018)"*. Although the islanders we all know, but because of the consumption of tourists is the island's main source of income, everyone is not easy to persuade, and thus giving rise to the East of the island beach pollution. *"Sometimes see tourists there is damage or littering behavior, if not serious we do not to stop because the Islanders are very friendly to tourists, and also don't want to offend them (TS106LR0198)"*. The field researchers to observe, also found that indeed the beach pollution. Penghu winter due to strong influence of the northeast monsoon, so the tourism season only six months, another half a year to have a chance to rest the surrounding seas.

4.6 Communication and Linkage with Outside

Jibei is among the Penghu's outlying island, external transport only depends on sea transport. *The shuttle boat to us local residents usually,*

during the tourist season, when many boat trips, take the tourist (TS206CL0081). Jibei Island is located in Penghu National Scenic Area, on tourism marketing, the majority of units by the government to be responsible. These government entities include the Tourism Bureau, Penghu National Scenic Area Administration, Penghu county government, and tourism yacht service. In addition to the government's tourism marketing outside, Jibei the B & B and resorts has a website to facilitate communication with tourists and provide travel and accommodation services.

4.7 Regional Integration

Integration in the region, Penghu National Scenic Area Administration will be located in the north of the island, planning to become North Sea recreation area. Among the biggest islands is Jebel. "Sianjiao Island" situated south of Jibei Island won its name due to the vast amount of submerged reefs around the island, and houses rich resources under the sea; the sand beach and its shallow coral ground is the best place for snorkeling and water activities. Tiejhan Island is a classic basaltic hill terrain; many seabirds will come here in summer to dwell and breed, making this the perfect spot for bird-watching. The nearby Gupo Island has an abrasion plateau which will be covered in the best quality wild laver at the end of winter, which is the perfect season for laver harvest. Mudou Island situated at the north end; it houses a Mudou Island Lighthouse which is over a hundred years old, the tallest lighthouse in Asia; it is now the most eye-catching target on the island [29].

5. DISCUSSION AND SUGGESTION

5.1 Discussion

After analysis, this study found the Jibei Island development of marine sport tourism basic success factors lays the island with natural landscapes, clean waters and white sandy beaches, coupled with a variety of water activities is to attract tourists to the resort causes. Because of the Jibei own Taiwan's most beautiful "Sand Beach Beak" and a white sand beach extending 1500m, this is the place where is development of marine sports tourism on Penghu, including the Cimei, Wangan, Magong Island cannot be compared to the place, so why Jibei call "the marine paradise" title, the island has unique advantages in geography and the environment. The results of this analysis,

consistent with Chang [18] and Jennings [17] pointed out that water activities are attracting tourists visit the destinations to holiday main reason, but not human destruction of the natural environment is a tourist favorite place.

The island's infrastructures (water, electricity, simple medical, communications, shopping, and road traffic) are set, and on the outside and convenient transportation. Local B & B and resorts provide tourist accommodation, there are seafood restaurants and seafood eateries, meet the basic conditions for the development of tourism. Above analysis results also verify Chang and Wu [7], Wu and Chang [8], Wu and Chang [14] studied the basic facilities Penghu tourism development, island's basic public facilities (water, electricity, simple medical, communications, shopping, and road traffic), on tourism development plays an important factor in whether or not to attract tourists to their destinations to visit. We learn from the results of interviews with residents, infrastructures for tourism reasons on the island, so to complete the construction, as well as with Chang et al. [22] found that tourism has a positive impact on Penghu's infrastructures to improve.

In complementary leisure activities (or scenic spots) aspects, Jibei Island there eight attractions, including beautiful beaches, hills, traditional fishing villages, temples, old stone weirs (ancient fishing methods), exercising stone tablet, intertidal ecological zones and small islands, plus night entertainment, providing additional tourism and leisure tourists demand. Because destination is the tourist stay more long time place, if can extend the time for tourists to stay, their consumption amount will be higher for the positive impact it will place higher [22]. Therefore island tourism development in addition to the main attractions, also again offer complementary leisure activities (or service), in order to meet the needs of tourists, and to extend the stay time [8]. Compared to other developments to Penghu marine sports tourist islands, including Cimei, Wangan, Magong Island, Jibei Island is the most adequate complementary leisure activities, and "stone weirs" throughout Taiwan as many places, providing tourists to experience the fun of fishing.

Jibei Island in shaping the tourism destination image, depends on the government grant funding, whether in the characterization of fishing, as well as holiday environment creation, are showing island resort atmosphere. However, there is a little more inadequate, that the traditional

architecture has been preserved fishing village poor, most of them converted into modern architecture, so that the traditional Penghu to Logu stone (after the death of the coral skeletons piled together, after hundreds of millions of years of changes in the crust, submarine ridges formed by the rock) cover a house or a wall, have become modern cement cover of the house, is more unfortunate place. Due to tourism development, often in order to meet the needs of visitors to live a modern life, but it was destroyed by its own local traditions, culture, and this is because the negative impact of tourist development [20,21], and also, in the same case in Jibei [22]. With residents at the time of development of tourism, but neglect the importance of preserving traditional buildings, while government departments concerning questions of law, nor restrict the ability of local residents rebuilt their houses. So the researchers believe that when local cultures still exist on the island, should think about with the assistance of local cultural workers, use of public lands to build traditional architecture, allows tourists to the depth of experience, can save a full traditional architecture like a Wangan Island [8].

This study found that Jibei Island residents for the arrival of tourists, and most welcoming attitude and tourists cost the Islanders 'main source of income. Even though the tourists some improper conduct on the ground, local inhabitants or tourism services staff, and held not to offend the tourists ' attitude, after all they had into the local "economic income". Also because sightseeing guest of coming, in sightseeing season for island Shang of residents brings has "opportunities", also so contributed to has local illegal B and B and resorts of industry who produced, and Government not banned of causes, is didn't want to offended "public opinion representative (County members)", if not occurred accident, will repeatedly of delayed banned, and usually in banned of when, are is sightseeing season has had, industry who are himself suspended business. B and B and resorts of these illegal workers, open is not only illegal, but also illegal without offering tours, resulting in destruction and environmental pollution of the local ecological environment, even a major accident occurred, which is needed to improve in the future.

Ap [23] and Leonard [24] research results, also pointed out that in the development of tourist areas, residents can adopt a friendly attitude to receive tourists, are important factors for success. From the development of Jibei case, friendly

residents, and is one of the important conditions for tourism development [7,8,14]. Main source of income because of Jibei, mainly rely on tourists, and referred to in the previous paragraph the researchers have reasons of negative environmental impacts, as well as the problem of illegal B and B and resorts operator. Because of the local inhabitants did not engage in tourism, in order not to offend relatives and friends living on the island (as is a small, all readily visible side), plus special places in Penghu tourism, working for half a year, rest for six months (six months without a job), so they hold a tolerant attitude. When tourism impacts of positive than negative time, residents usually will adopt a tolerant attitude towards tourism development, just as Cursoy and Rutherford [25] studies indicate that, if the positive impact than negative impacts of tourism development, local residents will be happy to accept the negative impact brought about by tourism. Due to the influence of the northeast monsoon in the winter, and Jibei tourist concentrated only in the high season from April to October, so half the rest periods, eco does not result in a significant negative impact.

Tourism development of the region, regional integration, and promote marketing is very important. As Jibei Island National Scenic Area is located in the government grant funding, and related resource inputs, so that the island was successfully created sport tourism destination. Plus the entire North Sea on the various islands of Penghu tourism resources of the entire North Sea Recreation Area. So from the above, the island marine sport tourism development, government assistance is a very important key.

5.2 Suggestion

According to the findings of this study, after discussion and analysis, the following recommendations:

Recommends Government Tourism authorities assist, allowing no business license B & B and resorts, according to government regulations become legally industry. Another proposal to abolish the nighttime fireworks and barbecue on the beach activities and promote related to ecological experience, so as to avoid excessive pollution of the beach.

Because tourists in the island's main means of transport for motorcycles, emissions caused by local air pollution. Recommend government assistance, counseling local motorcycle industry, and gradually switch to electric motorcycle to

maintain local air quality. Since marine recreation activities must have risk exists, so the local tourism industry, only to be marine recreation activities, we must pay attention to the safety of tourists. Especially out of the top of the security preparations (wear a life jacket), as well as tourist's basic safety education, we must actively implement, in order to avoid accidents.

As the study tour of the island, has been getting the attention, especially from the perspective of the present study tourism planning and development, and analysis of research directions island tours, but for tourists behavioral research, because of the ability of researchers, not further in-depth discussion. Above mentioned, therefore recommended that future researchers, based on the results of this study can be further in-depth island tourist consumer behavior, as well as tourism impact on the ecological environment.

4. CONCLUSION

This study confirms the island development of sport tourism planning for success is the most important natural resource environment, and provides a wide variety of water sports, island's basic infrastructures, external transport facilities, as well as providing tourists hospitality services. In sport tourism development, however, the most important promoters of the Government in planning local facilities and building should not be excessive on modernization, and keeps the original architecture style of the island. In terms of engaging in water sports, not only to strictly ban illegal tourist industry to protect the safety of tourists, but also to the preservation of the marine environment.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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