

Current status of marine leisure activities in Japan

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Abstract

The modern concept of sea bathing was first popularized by Dr. Richard Russell, who promoted the activity on the Brighton beachfront in 18th-century England. In Europe, the history of ocean utilization dates back to the era of Hippocrates, the “father of medicine”, in ancient Greece. While the initial reasons for using the ocean were related to regaining physical health, activities related to swimming have since diversified to include marine sports such as surfing and personal water craft (PWC) activities. A questionnaire survey on the utilization of beaches for swimming was conducted on beach users in Japan. The questionnaire administered to beach users included items on the reasons for using beaches, the amount of time spent swimming, the proportion of users renting beach houses, the safety of areas dedicated to swimming, and the coexistence of swimmers, surfers, and PWC users. The principal findings of the questionnaire survey were as follows: (1) Locations used for swimming could be classified as being one of three types: (a) day visitors (over 60% of beach users); (b) visitors staying for a few days (10–60% of beach users); (c) long-term visitors (10% of beach users). (2) Swimming was the most popular activity, followed by surfing and PWC activities. (3) Visitors in their 20s were the most numerous, followed by visitors in their 30s and teenagers. (4) Users of beach houses primarily engaged in PWC activities, followed by swimming. (5) Approximately 60% of beach users supported the coexistence of swimming, surfing, and PWC activities. (6) The survey of beach user satisfaction elucidated the following findings: (a) Users were satisfied with beaches as places to alleviate stress and to enjoy open spaces. (b) Users were dissatisfied with littering and water pollution.

Keywords: sea bathing, marine leisure, marine sport, swimming, surfing, safety.



1 Introduction

The utilization of the sea has changed with developments in human society. Unlike bathing in a swimming pool, which is generally done for pleasure or for exercise, sea bathing was thought to have had a curative or therapeutic value. In Europe, the history of ocean utilization goes back to Hippocrates, the “father of medicine”, in ancient Greece. Historical records show that he used seawater to treat certain ailments. In France, King Henry IV underwent treatment for scabies on the Normandy coast in 1578, while the Medical Faculty of the University of Paris established a research center for marine therapy for rabies in 1661.

The modern concept of sea bathing was introduced by Dr. Richard Russell (1687–1759), who recommended sea bathing as a therapy in 1750, and advertised the benefits of the sea in Brighton, England. Dr. Russell encouraged his patients to use what was later called the “water cure”, that is, medical therapy by the submersion in, and drinking of, seawater. In 1778, the first thalassotherapy center was constructed in Dippe, France, followed by the founding of the first marine hospital in Brighton, England in 1791. Furthermore, the National Academy of France certified thalassotherapy as a modern medical approach in 1849, while Dr. Luis Bagot established a thalassotherapy center at Rosscoff in Bretagne, France, in 1899. Thus, thalassotherapy became popular means of both treatment and leisure in France and Germany [1]. After World War II, water exercise therapy was introduced for rehabilitation and the promotion of health, becoming particularly popular in France. Today, thalassotherapy centers have been constructed in numerous parts of the world, and are utilized for health and cosmetic purposes.

During the 19th century, the practice of sea bathing, originally an upper-class activity, spread throughout English society. Although the development of modern society has been characterized by the mechanisation of mental rather than mechanical skills, the ruling pattern of thought remains close to that on which the English enlightenment was based. The seaside resort culture that took shape in the second half of the 19th century helped fuel the emergence of the mass leisure and entertainment industries, thereby contributing to the unprecedented proliferation of symbolic systems and usages, above all the “mechanisation of mind” that characterizes contemporary society. The development of seaside resorts was further accelerated by the introduction of the railways. The high death rate resulting from swimming in unsafe conditions led to the introduction of lifesaving practices in Australia in the early 20th century. With explosion in commercial air transport in the last 60 years, seaside resort areas such as Ibiza in Spain, the Queensland Gold Coast in Australia and the Florida Gold Coast in the US now attract millions of visitors annually. Conditions for swimming have thus gradually become less restrictive throughout the world, resulting in new lifestyles based on marine sports and marine resort activities [2]. New forms of seaside resort culture require novel considerations to address future issues.



2 Marine leisure activities and sports in Japan

In Japan, the custom of sea bathing was first introduced at Oiso Beach in Kanagawa Prefecture as a health treatment by the Dutch doctor Pompe van Meerdervoort in 1876 [3]. At that time, sea bathing was considered a health treatment, while hot spring bathing was considered a leisure activity. However, with the development of a national leisure and transportation system, the purpose of sea bathing changed from a health-oriented activity to a marine leisure and sporting activity. Marine leisure in Japan initially meant sea bathing, shellfish gathering and fishing, but various types of marine sports and recreation have become popular, particularly among young people. The popularity of yachting, motor boating, surfing, wind surfing and scuba diving have triggered great interest in marine sports. Yachting and motor boating were especially popular in the early 1970s. In Japan, there are several extended holiday periods, particularly Golden Week (from the end of April to the beginning of May), the New Year Holidays and the Bon Festival Holidays (mid-August). Businesses have also adopted flexible holidays to avoid the crowds during these holidays. As annual vacation has become an accepted company policy, taking days off is now easier. During shorter holidays, pastimes such as gambling are popular, but outdoor activities and sports have become popular for longer holidays. Of the 14 national holidays, four (Coming-of-Age Day, Marine Day, Respect-for-the-Aged Day, and Health-Sports Day) fall on a Monday, resulting in a three-day holiday. Gross actual working hours per person in Japan is about 2000 hours per year, and paid holiday is about 50 days per year for a decade, according to an inquiry by the Ministry of Health, Labour and Welfare. From a questionnaire survey of individuals over 15 years of age, the Japan Productivity Center for Socio-Economic Development found that, in 2007, approximately 18.5 million people took part in swimming and about 3.2 million participated in marine sports such as skin diving, scuba diving, surfing, wind surfing, yachting, and motor boating. Recently, the rate of participation for marine leisure activities, such as swimming, and marine sports, such as skin diving, surfing, yachting or motor boating, have been decreasing every year. A questionnaire conducted by the Japan Productivity Center for Socio-Economic Development found that the time and expenditures for all leisure activities have increased in the past several years. It is likely that swimming and marine sport activities have decreased every year due to increases in other types of leisure activities. Swimming comprised 22.5% of all reported leisure activities in 2000, but decreased to 16.8% in 2006. Participation in marine sports such as skin diving, scuba diving, surfing, yachting and motor boating improved slightly over the past several years, although overall participation remains low [4]. However, accidents due to marine sports and leisure activities have not decreased over the past decade. The number of seaside accidents in 2006 was 329 due to swimming, 60 due to surfing, 47 due to scuba diving, and 29 due to wind surfing. Although the vast majority of seaside accidents were self-inflicted, unavoidable/outside party accidents comprised 9% of swimming, 18% of surfing, 28% of scuba diving and 18% of wind surfing accidents in 2006 [5].



The past few decades have seen an explosion of interest in marine sports in Japan. Regardless of the reason for this interest, there is a growing need for people to be not only interested in such activities, but also able to pursue them in a manner which endangers neither participants nor bystanders. The number of swimmers has been decreasing due to increasing seawater pollution, heavy traffic, and the increasing popularity of other leisure activities [6]. However, environmental improvements at beaches may be able to attract seaside visitors back to swimming.

3 Questionnaire

A questionnaire survey was conducted at 19 public swimming areas in Japan, as shown in Figure 1. Beach names and survey periods are listed in Table 1. The survey was initially carried out at Motosuka, Katagai, Shirasato chuou, Taitou and Ichinomiya beaches along the Kujuukuri Coast in Chiba Prefecture, and Zaimokuza, Yuhigahama, Katase-nishihama and Chigasaki beaches along the Shounan Coast in Kanagawa Prefecture. These beaches are within 60 km of the nearest metropolitan area. Secondary survey locations were the Imaiham, Tatado, Iritahama, Shirahamaohama, Shirahamachuou and Yumigahama beaches along the Izu Coast in Shizuoka Prefecture, which are within 160 km of the nearest metropolitan area, and Shirahama Beach along the Shirahama Coast in Wakayama Prefecture, which is within 170 km of the Osaka metropolitan area in western Japan. The other locations were the Okuma, Manza and Maeri beaches in Okinawa Prefecture, with no metropolitan area within 1500 km. Day visitors as a percentage of total visitors surveyed are shown in Table 2. Visitors were classified into 3 types: (a) day visitors (over 60% of beach users); (b) visitors staying for a few days (10~60% of beach users); (c) long-term visitors (10% of beach users). A total of 2752 individuals were surveyed, and the ratio of men to women was roughly equal at each location, as shown in Table 3. Visitor type with respect to respondent age is listed in Table 4. Most respondents were between the ages of 21~30, followed by 31~40 years. In particular, the overwhelming majority of day visitors (1) were under 30 years of age, while most middle-aged visitors stayed for longer periods. The purpose of visiting beaches is shown in Table 5. More than 50% visitors at each location indicated swimming as the purpose of their visit, followed by surfing. Table 6 lists beach facility use rates for each visitor type. Over 65% of day visitors used beach houses, although hotels, lodges and other facilities were also used. Grades of beach houses, hotels and lodges are shown in Table 7, where (1) is the average of beach houses, and (2) and (3) are the average of hotels and lodges. The questionnaire survey graded beach houses, hotels and lodges on a 5-grade system (100, 75, 50, 25, 0) with respect to convenience, cleanliness, and satisfaction. Each facility received at least 50 points. In particular, hotels and lodges in Okinawa were considered excellent, with average scores of over 75 points. Table 8 shows responses regarding surfing protocol and safety, as evaluated by beach users, also using a 5-grade system. Surfing etiquette and safety were not evaluated at each location, as surfing is prohibited during the sea bathing seasons



or is moved to other locations at some beaches. This accounts for the high number of non-responses. Evaluations of personal water craft (PWC) activities by beach users are shown in Table 9. The method of valuations about PWC etiquette and safety was also evaluated using a 5-point scale, as for surfing. PWC etiquette and safety were also not applicable at some locations.

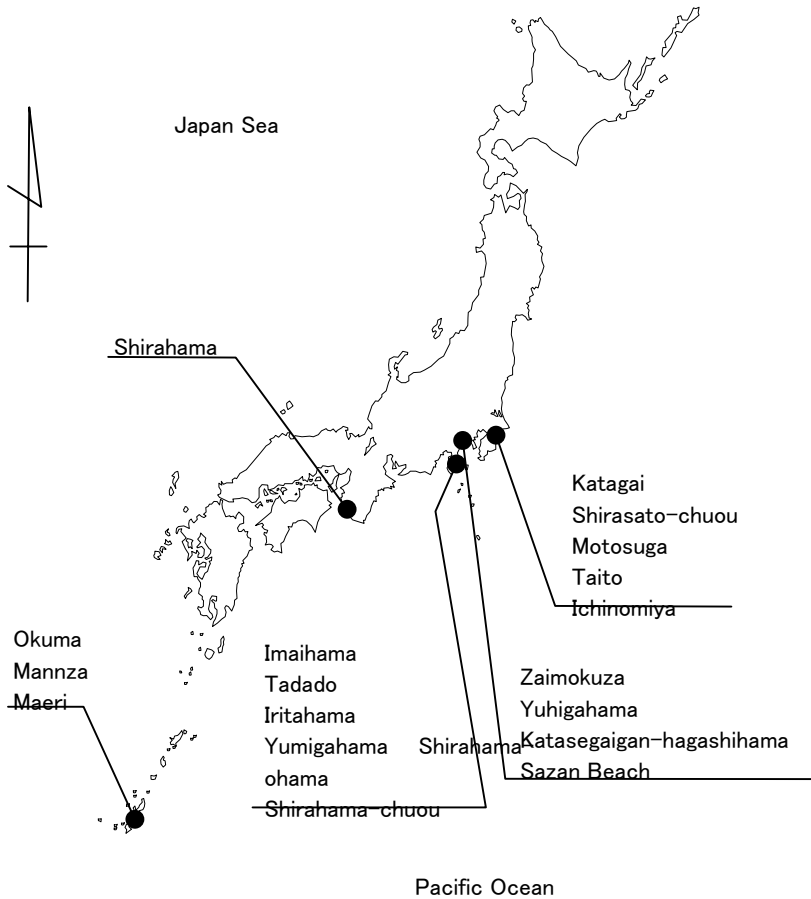


Figure 1: Surveyed beaches.

Table 10 shows the results of a question on whether swimming and marine sports such as surfing and PWC activities are able to coexist. Approximately 48% of survey respondents answered the coexistence was possible (“yes”), while 39% answered that it was impossible (“no”).

Table 1: Names of beaches and survey periods.

Name	Prefecture	City	Period (y/mo/d)
Katagai	Chiba	Kujoyuukuri	2002/8/1~2002/8/31
Shirasato-chuou	Chiba	Oamishirasato	2002/8/1~2002/8/31
Katagai	Chiba	Kujoyuukuri	2003/8/15~2003/8/17
Shirasato-chuou	Chiba	Oamishirasato	2003/8/14~2003/8/16
Motosuga	Chiba	Naruto	2003/8/14~2003/8/16
Zaimokuza	Kanagawa	Kamakura	2003/8/1~2003/8/31
Yuhigahama	Kanagawa	Kamakura	2003/8/1~2003/8/31
Katasekaiganhigashi	Kanagawa	Fujisawa	2003/8/1~2003/8/31
Shirahama-ohama	Shizuoka	Shimoda	2003/8/8~2003/8/9
Shirahama-chuou	Shizuoka	Shimoda	2003/8/8~2003/8/9
Shirahama	Wakayama	Shirahama	2003/8/2~2003/8/3
Okuma	Okinawa	Kunigami	2003/9/5~2003/9/10
Manza	Okinawa	Onna	2003/9/5~2003/9/10
Maeri	Okinawa	Ishigaki	2003/9/5~2003/9/10
Shirasato-chuou	Chiba	Oami-shirasato	2004/8/14~2004/8/16
Taito	Chiba	Misaki	2004/8/14~2004/8/16
Ichinomiya	Chiba	Ichinimiya	2004/7/24~2004/7/25
Sazan Beach	Kanagawa	Chigasaki	2004/7/31~2004/8/31
Imaiham	Shizuoka	Kawazu	2004/7/31~2004/8/31
Tatado	Shizuoka	Shimoda	2004/8/6~2004/8/8
Iritahama	Shizuoka	Shimoda	2004/8/6~2004/8/8
Yumigahama	Shizuoka	Minamiizu	2004/8/6~2004/8/8
Okuma	Okinawa	Kunigami	2004/9/5~2004/9/10
Manza	Okinawa	Onna	2004/9/5~2004/9/10
Maeri	Okinawa	Ishigaki	2004/9/5~2004/9/10

Table 2: Day visitors as a percentage of total visitors.

Coast	Beach	Rate	Coast	Beach	Rate
Kujoyuukuri	Motosuga	92%	Shirahama	Shirahama	22%
	Shirasatochuou	95%	Izu	Shirahamachuou	32%
	Katagai	66%		Shirahamaohama	32%
	Ichinomiya	95%		Tatado	30%
	Taito	100%		Iritahama	26%
Shounan	Yuhigahama	95%		Yumigahama	20%
	Zaimokuza	95%		Imaiham	14%
	Katassenishihama	95%	Okinawa	Manza	10%
	Chigasaki	81%		Okuma	10%
				Maeri	10%

Table 3: Respondents by gender.

Type	Beaches	Total	Men	Women
(1)	Kujiyukuri, Shounan	1577	781	796
(2)	Izu, Shirahama	824	417	407
(3)	Okinawa	351	171	180
	Total	2752	1369	1383

Table 4: Respondents by age (%) N/A: No answer.

Age	≤20	21~30	31~40	41~50	51~60	60≤	N/A
(1)	12.8	53.9	22.9	5.9	2.0	1.3	1.2
(2)	11.0	49.9	21.0	8.1	5.0	2.0	3.0
(3)	10.7	48.2	28.7	14.0	0.5	0.9	1.2
Total	11.5	50.7	24.2	9.3	2.5	1.4	1.8

Table 5: Purpose of visiting beaches (%) N/A: No answer.

Purpose	Sea bathing	Surfing	PWC	Walking	Other	N/A
(1)	53.7	20.1	7.5	17.3	1.3	0.1
(2)	72.3	18.5	3.7	4.8	0.6	0.1
(3)	81.6	10.0	6.2	2.0	0.1	0.1
Total	69.2	16.2	2.2	4.7	5.8	1.9

Table 6: Utilization of visitor facilities (%) N/A: No answer.

	Beach house	Hotel	Lodge	Other	N/A
(1)	65.0	9.3	19.9	2.6	3.2
(2)	32.0	21.0	18.9	26.5	2.5
(3)	2.3	48.7	32.1	14.7	2.2
Total	33.1	26.3	23.6	14.6	2.6

Table 7: Beach house, hotel and lodge grades (%) N/A: No answer.

	Point	100	75	50	25	0	N/A
(1)	Convenience	20.5	37.1	24.5	9.2	0.1	8.6
	Cleanliness	17.2	23.8	27.8	18.5	2.1	10.6
	Satisfaction	21.9	27.8	33.1	7.3	1.3	8.6
(2)	Convenience	22.0	49.0	22.0	2.5	1.5	3.0
	Cleanliness	23.5	43.0	26.0	4.0	0.5	3.0
	Satisfaction	27.5	47.5	20.5	1.5	0	3.0
(3)	Convenience	32.5	51.5	14.0	0	0	2.0
	Cleanliness	38.0	57.0	3.0	0	0	2.0
	Satisfaction	36.5	58.0	3.5	0	0	2.0

Table 8: Evaluation of surfing by beach users (%) N/A: No answer.

		100	75	50	25	0	N/A
(1)	Etiquette	15.3	34.6	28.8	3.8	3.4	14.1
	Safety	17.7	29.8	29.3	3.8	3.8	15.6
(2)	Etiquette	18.8	46.5	20.3	3.0	1.0	10.4
	Safety	18.3	36.6	26.2	7.4	2.0	9.5
(3)	Etiquette	21.7	51.3	19.7	1.7	0.8	4.8
	Safety	20.6	40.8	23.0	3.5	1.0	11.1

Table 9: Evaluation of PWC activities by beach users (%) N/A: No answer.

		100	75	50	25	0	N/A
(1)	Etiquette	20.7	21.6	25.5	4.8	5.8	21.6
	Safety	20.5	21.8	27.9	3.8	2.9	23.1
(2)	Etiquette	15.8	17.8	13.4	0.5	1.6	50.9
	Safety	14.9	17.3	13.9	1.5	1.5	50.9
(3)	Etiquette	17.8	19.7	24.8	11.5	6.6	19.6
	Safety	13.5	18.5	25.6	17.2	5.6	19.6

Table 10: Coexistence of swimming and marine sports (person) N/A: No answer.

	Yes	No	N/A	Total
Swimming	975	765	165	1905
Surfing	212	207	27	446
PWC	24	6	131	161
Walking	107	83	31	221
Other	10	6	3	19
Total	1328	1067	357	2752

4 Discussion

A 2005 study by the Japan Tourism Agency found that approximately 50% of tourists in Japan visit spas annually, while those visiting swimming areas comprised only 5% [6]. Spa visits and activities have increased from 32.4% of all leisure activities in 1985 to 53.0% in 2005. However, swimmers decreased from 6.5% in 1985 to 4.2% in 2005, even though marine sport visitors increased from 1.0% in 1985 to 2.4% in 2005. In other words, it is estimated that beach user activities have changed from swimming in favor of marine sports over the past 20 years. The number of registrants in the Japan Surfing League was approximately 1500 in 1965, but, due to a rapid increase in applications since 1980, it is estimated to be about one million at present. The number of registered PWCs is also estimated at 700,000 in 2006, up from 250 in 1983 [7]. Therefore, the coexistence of swimming with marine sports such as surfing and PWC activities is one of the most crucial topics today. The degree of user satisfaction



at 508 swimming locations in Japan was investigated in 2001 and 2004 by International Society for Customer-Driven Public Service & WORD Laboratories Inc. [8]. The purposes of visiting beaches were swimming (41.8%), walking (22.4%), marine sports (5.2%), and other (30.6%). Major complaints included: (1) litter; (2) poor water quality; (3) inadequate servicing of sinks, toilets and showering facilities; (4) problems with other visitors; (5) inadequate car park maintenance. However, positive aspects of beaches were also reported as follows: (1) relieving stress; (2) feeling of freedom; (3) abundance of nature; (4) large areas of wilderness around beaches; (5) free use of open spaces. The evaluation of 508 beaches in Japan resulted in the following rankings for the beaches in our study: Katagai, 289/508; Shirasato, 241/508; Ichinomiya, 317/508; Taito, 249/508; Zaimokuza, 371/508; Yuhigahama, 363/508; Sazan Beach, 307/508; Yumigahama, 33/508; Imaiama, 37/508; Tatado, 12/508; Iritahama, 2/508; Shirahama, 49/508; Okuma, 8/508; and Manza, 10/508. Katagai, Shirasato, Ichinomiya and Taito beaches along the Kujyuukuri Coast were ranked between 241~317, and Zaimokuza, Yuhigahama and Sazan beaches along the Shounan Coast were ranked between 307~371. These beaches are within 60 km of the nearest metropolitan area, and almost all visitors are day visitors. Yumigahama, Imaiama, Tatado and Iritahama beaches along the Izu Coast were ranked within the top 2~37. These beaches are about 150 km from the nearest metropolitan area, and many visitors stay for a few days. Okuma and Manza beaches in Okinawa Prefecture were ranked 8th and 10th in Japan. These beaches are private hotel beaches. Unlike beaches on the mainland of Japan, surfing and PWCs are prohibited in swimming areas during the summer season, so swimmers do not come into conflict with surfers and PWC users. Therefore, many visitors to these Okinawan locations considered coexistence with swimming and marine sports to be possible. However, marine sports have occasionally caused accidents involving swimmers during the off-season. Surfing and PWC etiquette and safety at these beaches are always provided and monitored by the coastal manager.

We will now discuss how to advance sustainable tourism for marine leisure activities in Japan. Changes in demand are linked to the amount of leisure time. People are now demanding a greater quality of life and extend leisure activities, as opposed to short periods of socializing around work.

A new and increasingly popular form of tourism favors the environment and environmental consciousness over sightseeing [9]. Concrete examples of this new type of tourism include long-term stays, green tourism, eco-tourism, cultural tourism, and health tourism. In Japan, where a full-scale vacation culture is not yet firmly established, long-term-stay-type sightseeing is expected to sharply increase in response to a demand for extended rural vacations and local activism resulting from the impending retirement of the baby-boom generation. Green tourism is a touristic leisure activity for enjoying nature and experiencing local culture and interactions with the residents of farm, mountain, and fishing villages. Green tourism has also captured public attention due to its promise of realizing a richer holiday experience through deeper interactions with a community. Eco-tourism is an ideal method of sightseeing to experience and



learn about natural environments and regional history and cultures. Eco-tourism also contributes to the sound development of local societies and economies, and is expected to be a sustainable way of balancing environmental and economic needs by discovering new attractions while preserving the resources supporting living cultures, such as the manners and customs closely related to local natural environments. Cultural sightseeing is aimed at satisfying an intellectual demand for the cultural elements of the Japanese history and tradition. It is important for the realization of a sightseeing nation to establish a deeper mutual understanding between each area and country and to prevent cultural sightseeing interactions from becoming isolated experiences. Health tourism is a new type of sightseeing in which visitors restore, improve and maintain their health by visiting areas of natural beauty and enjoy natural and unprocessed meals.

For the marine leisure industry, it has become extremely important to grasp trends in leisure demands precisely [10]. In particular, each type of existing marine leisure activity must raise its profile, popular and recreational surveys should be added for keeping up with general and individual trends, and the level of leisure technology and equipment should be improved. For example, it is thought that multi-purpose leisure has increased as visitors also participate in fishing and diving activities even when their intended activity has been swimming. In addition, not only management efforts, such as improved facilities and services, but also social support, such as increased leisure time, relaxation of congestion and safety measures, will become increasingly important. Further, technical advancements, such as seasickness prevention, tools and articles will support the development of marine leisure activities in accordance with trends in demand.

5 Conclusions

To clarify the present status of marine leisure activities in Japan, we conducted a questionnaire survey of 19 public swimming areas. Results indicated that beaches were mainly used by young men and women in their 20s, and the main activity in these areas was swimming. However, the rate of beach house use was fairly low compared to the total number of beach users. Therefore, it is important for visitors to consider beach houses as a convenient option. As marine sports such as surfing and PWC activities have rapidly increased in past 20 years, beach houses are not yet prepared to accommodate these types of visitors. The primary purpose of beach houses is the accommodation of swimmers. Therefore, in the future, we must accept the coexistence of marine sport participants with beach users. Coexistence and cooperation between swimmers and marine sports participants will be required to address the changing needs of day visitors. Beaches need to attract large numbers of visitors staying for at least a few days to compete with tourist attractions in neighboring areas. Furthermore, it is important to have additional natural attractions for long-term visitors staying in hotels and lodges. Recently, various types of marine sports have increased in popularity. It is important to develop a common system of etiquette and safety to facilitate the coexistence of swimmers and marine sports participants.



Additionally, it is important that visitors understand the protocols and safety procedures for marine sports so that effective safety measure can be implemented by rescue services. However, the coexistence and cooperation between marine sport participants and fisheries is also an important issue for revitalizing beaches. Monitoring of marine sport safety by lifeguards and other rescue personnel is necessary to avoid conflicts with fishermen.

Regardless, marine sports are a core aspect of regional development that is anticipated to become increasingly important, allowing beaches and coastal areas to prosper year-round. However, coastal managers and lifeguards cannot relax their monitoring of swimmers and marine sports participants. Marine sports participants must be always attentive to the protocols and safety procedures in swimming areas and marine sport areas should continue to be maintained separately.

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