

# Research on the Management of Public Crisis and Environmental Monitoring System of Tourism

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## Abstract

The paper discusses the main problems of tourism in current China by recognizing the influence and harm of public crisis on tourism. And then the essential assumption is put forward to strengthen the environmental protection and build an effective monitoring system of tourism.

**Keywords:** Public crisis, Tourism environment, Monitoring system

Tourism environment is an important component of the social environment and it is an important place where tourists can enjoy the return to nature, relax and open recreation and the learning experience. It indicates the improvement of the tourism quality and aesthetic taste. At the same time it is also the carrier of sustainable development and harmonious building in tourism. But occurrences of the public crisis, which poses hard threat to human safety and social steadiness, and becomes the most minatory factor which makes tourism industry become the most sensible and suffer the most serious loss. Therefore, the emphasizing on study and how to fully acknowledge the imaginable harm caused by the public crisis possess academic and practical meaning to the problems such as how to strengthen the environmental building, how to improve the attraction of Chinese tourist destination, how to increase the total competition of Chinese tourism industry, how to realize the sustainable development of tourism industry, how to beautify tourism environment, and how to raise the consumer's life level. To make the object come true, the building of perfect and scientific monitoring system of tourism that is made to anticipate the crisis, to take precautions against crisis, and to deal with crisis is our first instant imperative. The paper just gives the discussion on the previous study.

## 1. The harm and influence of public crisis on tourism

### 1.1 Identification of public crisis

Public crisis usually refers to the abrupt accident or state of emergency. But now in academic circles many views diverge reasonably. Kathleen Fearn-Banks, one scholar, claims that "crisis is that one incident obstructs normal business transactions and potentially threatens business survival". Otto Lebinger defines "the crisis as the event threatening the company's interest rates obtained in future, growing, even survival" (Zhu,2003); However, analyzing from the influence of crisis, some scholars such as Ren-shengde, Xie-bing give the explanation that " crisis is the incidents or actions potentially making the downside to the honor or credit ,even the economy of local organization(government or enterprise)"( Ren,2003); In addition, many internal scholars who make the crisis contacted with the opportunity consider that in the one hand, crisis stands the dangerous circumstance, in the other hand it also stands lots of opportunities, which dialectically interprets that the crisis and opportunity are the two sides of incident's development, and that crisis involves the opportunity (Zhang,2003). All the views above have the common characteristic which emphasizes the result of the crisis, and considers the crisis as some kind of disadvantage taken by the harmful incidents to some organization, and "they rarely have the deep anatomy on the origin of crisis" (Zhu, 2003).

### 1.2 Connotation and harm of public crisis

Public crisis differed from the normal accident is not only the crucial instance usually making the great influence to the public life, but also the state of emergency in general which means that "the crisis' occurrence and eruption that run beyond the ability of the government and social management badly effect the social normal operation and threaten the life, property, and environment and so on, so it requires special measures adopted by the government and society" (Zhang, 2003). The emergencies of public crisis such as 9.11 in American , SARS in 2003, bird flu

erupted in the spring in 2005 all have brought the austere issue that is how to deal with the crisis and how to acknowledge the crisis to the academic and industry ,especially the government. Nowadays, the issue has become the important one that urgently need to be researched. Obviously, the public crisis involves in every aspects of social life, it moreover disorganize the normal social economy instantaneously. How to break away from the hardship not only demands the public administrative management make the decision timely, but also need a high payment.

Perniciousness of the public crisis is tremendous. According to the data offered by Global Disaster Statistic, from 1996 to 2000, various disasters and crisis make the economy lost as high as 253 billion dollars, and make 425.000 people die. In the last decade, only the various crisis caused by the nature disaster make the number of the influenced people reach 211 million every year. In developing countries, the number of people died of all kinds of disaster and crisis is 95% of the dead people. During the past 3 decades, nearly half disaster and crisis of the whole world happened in Asia, as the result, Asia becomes the area where the various disasters happen much frequently and is 80% of the world population influenced by disaster and 40% of the dead people and 46% of the economic loss(Zhang,2003). Simultaneously, perniciousness of the public crisis has some extensibility. According to the news from Xinhua News Agency, the latest report issued by Economic Committee of APEC on November the 16<sup>th</sup> 2005 indicates that America has lost about 662 billion dollars until 2003 since the events happened on September the 11<sup>th</sup> 2001. The loss includes direct loss, macroeconomic shock caused by the decline of consumers' confidence, and the increasing expenses of security and national defense, and the specific digitals are 45 billion dollars for direct loss, 175 billion dollars for macroeconomic loss, 442 billion dollars increased for security and national defense. Therefore, the loss caused by the eruption of public crisis is not merely on the surface layer, moreover, in the deep level it can make the national economy assigned on a large scale (Yanzhao metropolis newspaper,2005).

### *1.3 The influence of public crisis on tourism*

To tourism industry, the harm of public crisis is much more obvious. Tourism activity is the spatial alternation which refers to people leaving from their ghetto to dissimilar place and is the most obvious feature of tourism activity. So tourists' purpose of the realization of tourism actions must possess great sensibility to the destination's tourism environment which not only lies on the perfection of integrated system for the six elements-food, hospice, traffic, visiting, shopping, entertainment-in the process of tourism, but also the public security of the destination. Apparently the public security's current situation of the tourist destination determines the degree of tourists' accessibility, which also lies on whether the public crisis happens or not. To the tourist activity, the occurrence of public crisis must result in two effects, one is the discontinuity of the ongoing tourist activity, the other one is the cancellation of the unformed tourist action. So the consequence of the above circumstance makes the tourism industry suffer obvious loss certainly. At the same time, the downside brought by public crisis occurrence to the tourism environment is far-reaching. On the one hand, it not only brings about fear and pressure in the tourists psychology, but also lowers the attraction of tourist destination largely, on the other hand, it brings downside to the tourist destination's environmental safety, environmental health and environment of food and drink.

For instance, SARS influenced the tourism industry in our country heavily in 2003. According to the estimated material, the loss of tourism industry in our country should exceed 210 billion in 2003. SARS is the disease with high infectivity, spread velocity, tremendous harm and high mortality rate, until May 2003, it has spread out to 21 provinces since the first case appeared in Guangzhou in November 2002 and become the main enemy jeopardizing the society in our country. The harm and the involved area are so gigantic and wide that we have rarely met before. First, SARS has infectivity. Based on the chemical certification, the path of the infectivity is the close touch between people, especially in the assembled public place such as the supermarkets, bus stations, ports and airports, etc. It is universally acknowledged that the tourism industry is the comprehensive industry that offers the service of the food and drink, the residence, the traffic, the tour, the shopping, the amusement and so on to the tourists. This industry contains all the social departments and every tourist organization, so it possesses the great comprehensive feature. It can clearly be seen that the tourism industry is such one with rather assembled and widely-moving population. Confronting the high infectivity of SARS, tourism environment is deemed to the initial problem attracts the most attraction. To permit SARS to spread out, the government adopts the emergency measures that are the cancellation of the long vocation in May Day and the discontinuity of various tourist activities for the purpose of permitting the further spreading of SARS caused by the wide movement of tourists. Secondly, SARS spreads fast. The pathogen of SARS with frequent saltation has been confirmed as the corona virus like the cold virus. The spread has many ways that mainly are the close touch, saliva and the breath of people. The tourism environment undoubtedly becomes the important place where the pathogen spread because of its features that are tourists' gather and wide movement. Thirdly, SARS has intricate cause of disease. Therefore, during the process of the cure, there was no effective medicine to kill the SARS virus at that time, so it is necessary to adopt the measure of separation and halt the tourism activity by administrative means. The occurrence of SARS brought the great loss to our country's tourism

industry. And the prosperous tourism steps into the state of dormancy or shock dormancy in the turn of a hand, simultaneously, the travel agency also steps into the lowest stage of development since the People's Republic of China was founded. Certainly, the reasons why the previous circumstance appears must be related to the feature of SARS itself and the characteristic of the tourism industry. However, surveyed carefully, when the tourism environment faces this epidemic situation abruptly appearing, it exposed many related elements that were considered as the important reasons for the influence of the unavoidable epidemic situation.

## **2. The analysis on the present condition of our country's tourism environment**

All the catastrophes caused by the nature are the disaster for the human being, for the human being can not resist on the nature. Recently, as developing fastly, the tourism industry has already become the important cornerstone industry of our country, which brings the social benefit and economy benefit; also, it becomes the new economic growth point. But in fact, we emphasized too much the economy benefit of tourism than the social benefit, especially the insistence on the scientific development and the reality of the sustainable development of the tourism industry especially the environmental problem in the tourism development, which to a certain extent plants the foreshadowing for the occurrence of the crisis.

### *2.1 Tourism environmental quality is not optimistic*

As we all know, Clean and beautiful, comfortable and convenient, safe and sanitation, relaxed and happy travel environment is the basis for the survival and development of the tourism industry. So, "a good environment is an important basis for the tourism development, and the development of the tourism also can have a good effect on the environment protection."(Lin, 1999), the tourism environment influence the continuing development of the tourism. But recent years, the tourism development shows that people pay much more attention on the economic benefit, and ignore the social benefit of the tourism. Among them, the improvement and controlling for the tourism environment lack a set of efficient means. The tourism environment protection and construction are paid less attention and the social benefit of the tourism environment are ignored. The tourism action cause a lot of problems, such as air pollution, sound pollution, water pollution and the damage of the zoology vegetation. The over-exploitation of the tourism resource cause the change of the environment, the damage of the nature and human sight by the people flow and the decline of support ability of the resource and the tourism facility, all the problems have influenced the tourism environment's entry. These problems have become a kind of social problem and attract more and more people's attention. The practice proved that, the tourism environment is the precondition and basis for the continuing development of the tourism, and the environment quality have a direct effect on the tourism's longterm development.

### *2.2 Public crisis's challenge to the tourism environment*

As the public crisis not only has enormous threatening and destructive ability, but also has unexpected and uncertain characteristic, if the public crisis break out, the disaster it brings will be heavy. However, public crisis can be prevented, controlled and lowered. As far as tourism is concerned, to strengthen the prevention and control of public crisis, the primary task is to build up an environment controlling system for the industry, and to reinforce the improvement and consolidation. Improving tourism environment and regulating environment order are the main contents of the sustainable development in tourism. furthermore, the destruction of resource caused by the decline of resource loading ability due to tourism activity can be prevented, if a series of measures can be carried out to control the deterioration of some environment such as traffic, dinner and accommodation which is the result of overexpansion of tourism activity.

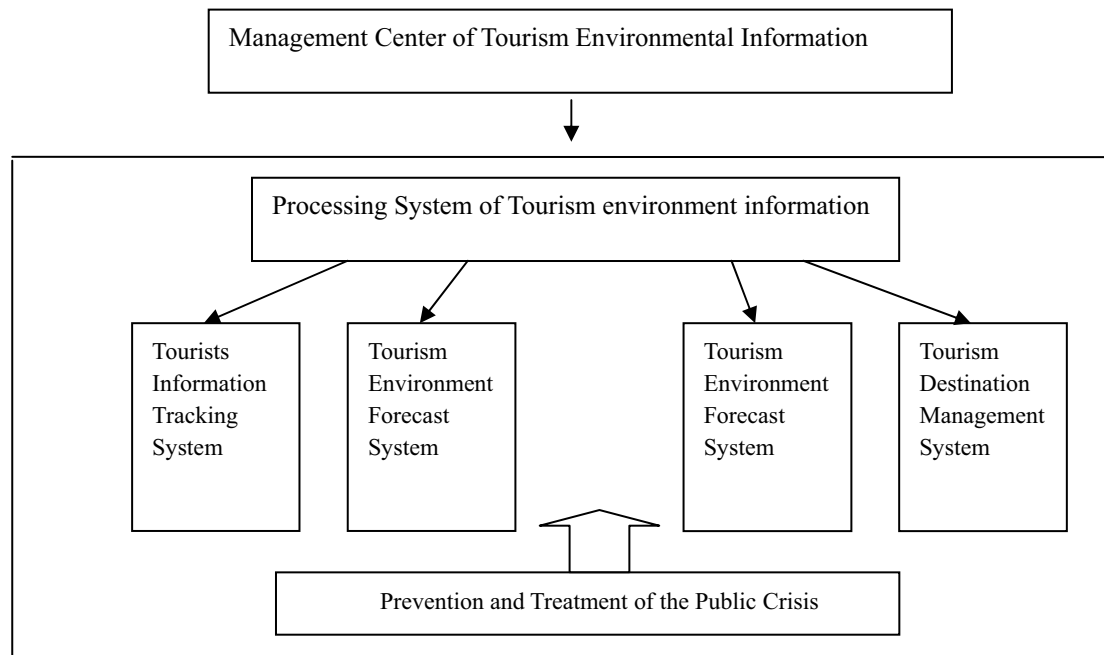
Tourism activity involves various social sections. It is its basic elements, tourism subject, object and tourism media that constitute tourism industry. Tourism subject, namely tourists, is the dominating element and always is at the center of tourism activity. But tourists are differ in thousands ways. The different vocation, age, gender, education background of tourists who come from different region and countries give the group great complexity and diversity. Tourism object is the object of tourism activity, namely tourism resources, including natural resources, human and social resources, which are important carrier of tourism industry. Tourism media is the bond that links subject and object together, such as travel agencies, travel service constitutions, travel traffic department and the travel sections of catering, entertainment and shopping. Therefore, the areas that tourism industry involves are very extensive, and whether tourists, who are the most essential part of tourism activity, can accomplish their traveling goals are depend on the effective operation of every aspect of tourism activity as catering, accommodation, traffic, visit, shopping and entertainment. All these activities imply tourists' characteristic: universality, complexity and mobility. The side effect of these features provide the possibility for the spread of some serious epidemics such as SARS and Bird Flu, and make tourism become an important approach to spread epidemics and cause great safety incidents, such as the

stampede happened in Miyun of Beijing in the year 2004.

### 3. The thinking of tourism environment monitoring system construction

#### 3.1 The structure of tourism environment monitoring system

Aiming at the damages and the traits of public crisis and combined with the features of tourism industry, it has been an urgent affair to quicken the construction of travel environment preventative system, in order to maintain society stability, prevent the wanton spreading through traveling activity and safeguard the tourists' health. Given various factors, it is extremely important to establish an effective environment monitoring system to supervise whole tourism environment. the system is illustrated as the following chart:



#### 3.2 The function of major subsystems

##### 3.2.1 Tourists information tracing subsystem

As the main body of tourism activity, tourists play many roles. They are victims of outbreak crisis, spreaders of epidemics and destroyers of travel environment as well, so it is very necessary to construct tourists information tracing system to ensure the health of tourists' own and others. Through modern scientific informative management, the system traces the information of tourists' activity, from leaving their residence for travelling in another place to returning to the residence. Strict physical examination, registration for record, and informing the higher level in time to summarize the information should be carried out in important points, so that tourists can base their travel activity on a dynamic, ordering and informing system.

##### 3.2.2 Environmental monitoring subsystem of tourism destinations

The most important task of constructing this system is to establish the environmental protected index system of each scenic and historic area. (including natural heritage, cultural legacy and natural-cultural double legacy)

In the protection of the tourism spots, it is necessary to implement the relevant environmental protection Acts, but also take positive and effective protection control measures. As the establishment of epidemic prevented center, the equipment of the necessary human and material resources and financial resources, the enrichment of the necessary medical facilities and equipment, the implementation of registered system and diagnostic system and so on.

Meanwhile, the population coming into the scenic areas should be limited. As to the management of these areas, a strict and effective control system should be established. It involves both the responsibility of sections and detailed environmental management plans. For example, make out the plan to clear out the business with poor infrastructures and sanitary condition, to protect the good appearance of all spots, to deal with rubbish, to purify lakes, to repair the roads and to open scenic spots in turn at the season. In such a way, the environment of scenic areas can be best improved. Take the Three Gorge Project as example. During the construction, the water storage of the reservoir must have bad effects on the ecology environment. then ecology and environment monitoring system come into being in order to eliminate the these effects, with the purpose "to have a systematic inspection to the ecological and environmental problems caused by the Three Gorge project, to find out and master the changing rules of ecology

and environment in the Yangzi River basin after the building of the dam, to validate and check the appraisal results of effects on environment so as to provide basis for environmental construction and management of the reservoir area, and to check and put into effect the environmental protective measures during the running and construction of the project” (Tao,2002),The major functions of the system are “organizing those related sections in the project-affected area to form a cross- regional, cross-department and interdisciplinary monitoring network; carrying out regular inspection, observation and investigation of important environment elements, and setting down the monitoring technique regulation for some items such as hydrology, meteorology, sediment, water quality and so on, having regular analysis of the monitoring materials so that put forward record and annuals of the environmental quality; establishing an ecological and environmental information database and analyzing the dynamic current so the countermeasures for eliminating the bad effects on ecology and environment can be brought forward; and performing following monitor, supervising, investigation and handling of the outburst ecological and environment accidents.” the system is an enormous scientific monitoring network, including 12 subsystems, namely meteorological observation, the monitoring of atmosphere, noise, water quality, hydrology and sediment, hydrobiology, earthquake and the observation of reservoir band stability, earth resource, terrestrial animals and plants as well as species resources, the observation and investigation of population health, and the automatization monitoring (Tao, 2002).

### 3.2.3 The controlling subsystem of tourism management industry.

Tourism management trade is the main body of the healthy development of tourism, and is the emphasis of tourism environmental prevention system. It consists of travel agencies, star-level hotels, travel traffic department, travel consultation institution and so on. The regulation of the trade should be based on unified informative management, and then an interactive platform can be established between different travel enterprises through technical interface. Such as Various types of enterprises reporting system, including the number of the attraction and the reception of tourists, the tourists geopolitical relationship, the safety precautions for the tourist and so on. Tourism Enterprises should focus to take protective measures on the prevention of the sudden crises and various of the epidemic. For example, the shared facilities and equipment of Various of Star-rated hotels, toilet, rooms, telephone, the corridor and etc. These important places need disinfection and cleaning up; Health and safety targets of stations, ports and terminals, the airport; the Setting standards of epidemic medical institutions, the medical facilities and equipment, the prevention measures of the outbreak of disease, etc. The tourism charge departments should intensify the supervision and management of the system, to ensure the system operate effectively by the measures of the System, supervision and inspection.

### 3.2.4 The forecast subsystem of tourism environment information service

This system is for the purpose of regulating the traveling environment quality from macroscopic and the microscopic aspects, and establish a set of scientific and effective management by supervision pattern and the traveling environment appraisal system through the joint network of the scenic spot, the traveling culture city, traveling transportation system, traveling hotel, travel agency, and so on. For example, the climatic change of the traveling scenic area, the air quality forecast, the maxim population index, touring line supporting capacity index, management of traveling vehicle index, the scenic spot service standard index, examination and forecast of tourist's state of health, establishment and operation of medical service organization, and so on. At the same time, the system should increase the propaganda of related traveling policies and common sense, the security knowledge, the epidemic situation knowledge information's propaganda and service, announcement of related epidemic, the traveling guide, the traveling tendency and so on. Through the operation of this system, the entire traveling environment presents one kind of virtuous and dynamic development situation.

In brief, crisis is the hidden danger in the tourism development, attach importance to the public crisis, hold closely the important link of traveling environment quality, grasp jointly and manage concertedly the tourism development, the environment quality and the crisis prevention. Properly handling the relations between the short-term interests and the long-term interests, the department interests and the national interests, economic interests, the social benefit and the environment benefit. “Enlarge investment in environmental monitoring, supervisory, emergency system, and propaganda ability construction”. “Improve the environment and safety information, emergency monitoring and early warning system and establish a mechanism for sharing of information resources, the environment for accurate judgement of the situation, provide basis of decision-making for unexpected incidents” ( Xie ,2005),so the tourism environment will be having a long-term development, tourism environmental quality will be improved fundamentally and the tourism industry will be into the healthy, sustained, safe and orderly development track.

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